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DECEMBER 15, 1952

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Vol. 133, No 24 December 15, 1952

# RAILWAY AGE

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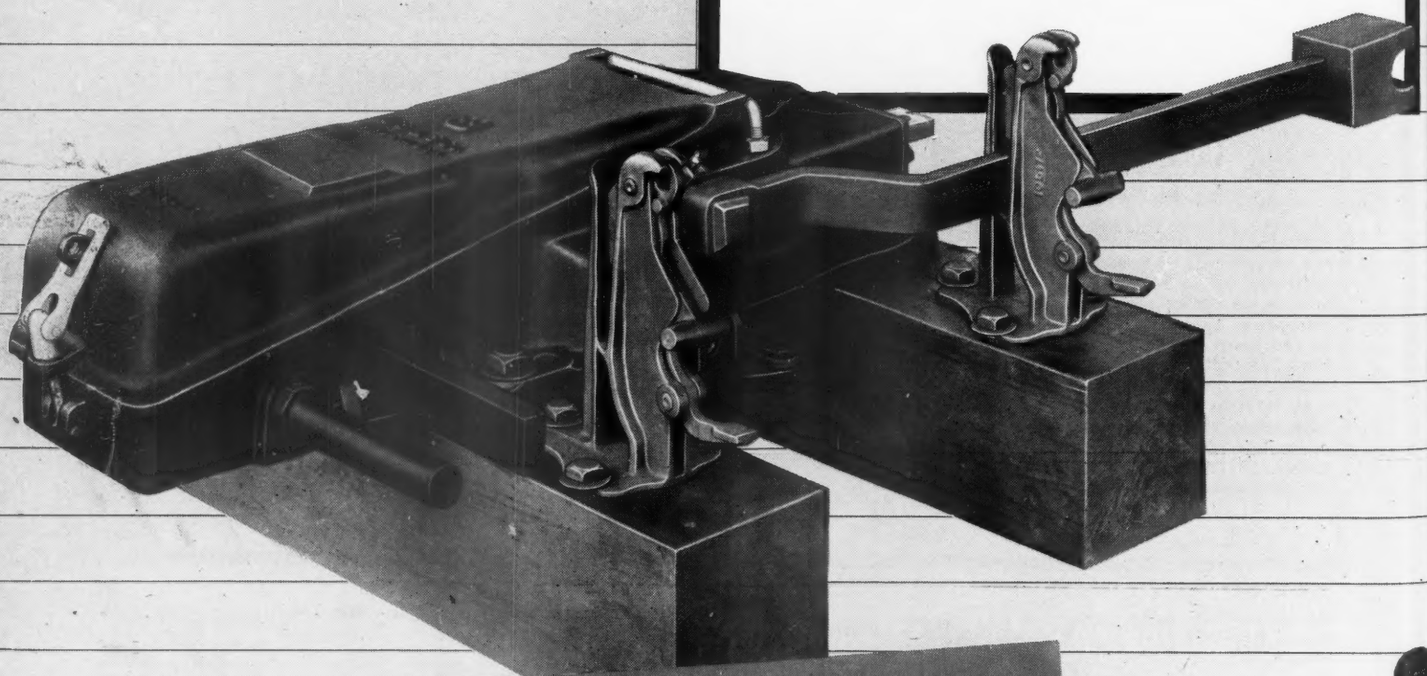

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# WEEK AT A GLANCE

### CURRENT RAILWAY STATISTICS

| | |
|---|---|
| **Operating revenues, ten months** | |
| 1952 | $8,738,353,866 |
| 1951 | 8,586,370,241 |
| **Operating expenses, ten months** | |
| 1952 | $6,680,407,118 |
| 1951 | 6,700,217,593 |
| **Taxes, ten months** | |
| 1952 | $1,052,093,753 |
| 1951 | 984,057,603 |
| **Net railway operating income, ten months** | |
| 1952 | $ 853,008,994 |
| 1951 | 732,823,912 |
| **Net income, estimated, ten months** | |
| 1952 | $ 594,000,000 |
| 1951 | 492,000,000 |
| **Average price railroad stocks** | |
| December 9, 1952 | 67.82 |
| December 11, 1951 | 54.84 |
| **Car loadings, revenue freight** | |
| 48 weeks, 1952 | 35,311,988 |
| 48 weeks, 1951 | 37,799,088 |
| **Average daily freight car surplus** | |
| December 6, 1952 | 5,902 |
| December 8, 1951 | 7,775 |
| **Average daily freight car shortage** | |
| December 6, 1952 | 1,532 |
| December 8, 1951 | 4,316 |
| **Freight cars delivered** | |
| November 1952 | 5,929 |
| November 1951 | 9,824 |
| **Freight cars on order** | |
| December 1, 1952 | 87,657 |
| December 1, 1951 | 129,158 |
| **Freight cars held for repairs** | |
| November 1, 1952 | 94,843 |
| November 1, 1951 | 91,726 |
| **Average number of railroad employees** | |
| Mid-October 1952 | 1,248,178 |
| Mid-October 1951 | 1,271,168 |

## In This Issue . . .

**IT WAS PRETTY BLUNT TALK** that the National Association of Manufacturers got at its recent New York meeting from NYC President William White. The excerpts from his talk quoted on page 48 cover only some of the high spots; omitted therefrom are some of the specific examples which Mr. White cited, where members of the ultra-conservative and supposedly anti-socialistic N.A.M. have acted suspiciously like exponents of socialism in transportation. It may be charitable to assume that they did so unwittingly—but after Mr. White's speech they can have no future excuse for "advocacy of creeping socialism" or for "thoughtlessly aimed brickbats" which help keep the railroads on the slum side of the economic tracks.

*HOW THE SP's NEW TELEPHONE SALES OFFICE for passenger tickets works in actual practice is told in words and pictures—mostly pictures—on pages 49, 50 and 51.*

**MORE GAS TURBINE LOCOMOTIVES** — 15 of them — have been ordered by the Union Pacific from the General Electric Company, along with 54 diesels from E.-M.D. Receipt of the former order, in 1954, will bring the UP's total turbine fleet to 25 units, which should be enough to give a pretty valid indication of the turbine's true capabilities, at least for conditions such as the UP encounters in some of its more rugged districts. Other equipment orders included 400 freight cars and 13 passenger-train cars, for seven different railroads.

*SEPARATION OF FREIGHT AND PASSENGER traffic departments is due to become effective on the New York Central on January 1, with the December 11 announcement that Arthur E. Baylis has been elected vice-president, freight traffic, and Ernest C. Nickerson, now general traffic manager of the Chicago & North Western, has been elected vice-president, passenger traffic. Other NYC executive changes, also to become effective January 1, are: Karl A. Borntrager to vice-president, operations and maintenance; Martin J. Alger to vice-president staff; Frank J. Jerome to vice-president, engineering, development, research and real estate; and James J. Frawley to vice-president with special duties assigned by the president.*

**ARE THE RAILROADS USING** a boy to do a man's job? In other words, are they using too little power on snowplows? There's an interesting discussion of that on pages 56-57.

*AN ORE MOVEMENT RECORD was set by the railroads in the period between the end of the steel strike and the close of Great Lakes navi-*

## WEEK AT A GLANCE

*gation, according to the A.A.R.'s Car Service Division. By setting that record, the rails made it possible to put the season's total ore shipments "over the top" of the 75-million-ton goal needed to stockpile steel mills for the winter.*

**WHO'S GOING TO PAY?** That was the pertinent question addressed to the Automobile Club of Maryland in a recent speech by W. Arthur Grotz, president of the Western Maryland (page 66). He was referring, of course, to the "nationwide advertising campaign" with the "clever name" of PAR—Project Adequate Roads—which has as its apparent goal the spending of *$105 billion on major highways alone* in the next 15 years. Mr. Grotz' question is one that is as yet wholly unanswered—and one that is a real puzzler—especially considering the already dizzy heights of existing taxes, the difficulty in meeting even present highway costs, and the patent unwillingness of those who use highways for profit (and for whose further profit PAR is primarily intended) to bear even their fair share of costs now being incurred.

## In Washington . . .

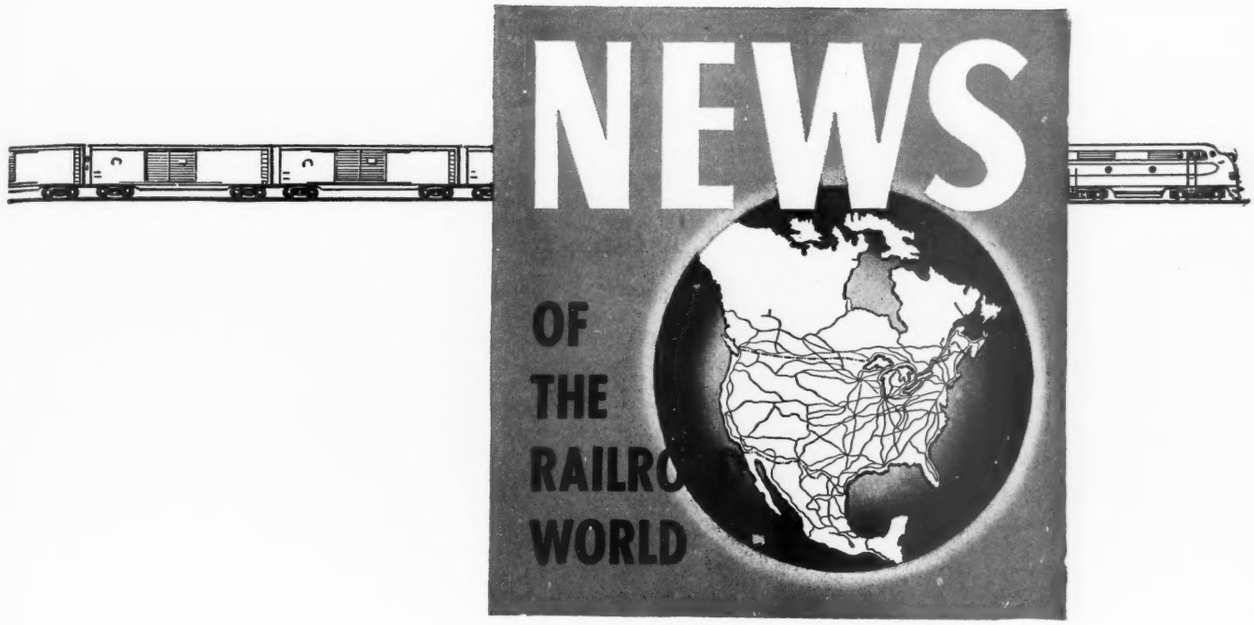
**A STANDARD RULE** setting out terms and conditions under which train and engine service employees may be required to perform two or more classes of road service in a day or trip has been prescribed, with a dissenting opinion from labor representatives, by the arbitration board appointed pursuant to last spring's settlement of the wage-hour dispute with the conductors, engineers and firemen. The chairman of the board, Paul N. Guthrie, was immediately appointed to act as referee in "improvement factor" wage increase discussions, which began last week in Washington. Both events are reported in the news pages.

*DATA JUST RELEASED, on October revenues, expenses and earnings, shows up just about as might have been expected. As compared with 1951, gross is up—a little; expenses, with the latest "cost-of-living" wage increase in effect, are also up—a little; taxes are up—a lot. As a result, N.R.O.I. and net are both down—the former a little; the latter just about 10 per cent. Detailed figures, and comparable figures for the first 10 months of this year and last, will be found in the news columns.*

*TRANSPORTATION is "the No. 1 economic problem which faces the new Congress," said P. Harvey Middleton, president of the Railway Business Association, in a statement issued last week. Unless that problem is solved, he said, "on a basis of equality in regulation and competition among the various types of carriers, not only railroads but all other forms of transportation face danger of nationalization." Further excerpts from Mr. Middleton's statement are quoted in the news pages.*

## . . . And Elsewhere

**NO DEFINITE DATE** has been set—but at least one railroad is definitely planning a near-future installation, on a full operating basis, of commercial television. The railroad is the New Haven. Location of the proposed installation is the city of that same name—junction of the road's heavy-traffic Shore and Connecticut Valley lines, its change-over point between electric and diesel power, important passenger terminal, and (at nearby Cedar Hill) one of its major freight classification centers. As the project is now planned, TV cameras will be placed at a number of remotely controlled interlockings throughout New Haven terminal territory, with viewing screens in a single centrally located tower, permitting the operator in that tower to see everything that happens at the distant interlockings.




## Arbiters Write Rule on More than One Class Of Service for Train and Engine Employees

An arbitration board functioning under provisions of the Railway Labor Act has prescribed a standard rule setting out terms and conditions under which train and engine service employees may be required to perform two or more classes of road service in a day or trip. The arbitration proceeding was an aftermath of last May's settlement of wage and rules disputes involving operating employees.

The settlement provided for arbitration of that phase of the disputes which related to the more-than-one-class-of-service rule. The "standard" rule prescribed by the board of arbitration provides generally that employees called upon to perform more than one class of service shall be paid for the entire service at the highest rate applicable to any class of service performed, receiving at such rate full payment for their regular day or trip plus extra compensation on a minute basis for all additional time required in the other class of road service.

Other provisions of the rule stipulate that when two or more locomotives of different weights on drivers are used during a trip or day's work, the highest rate applicable to any locomotive used shall be paid to enginemen for the entire trip or day. As to overtime rates, the rule provides that they shall apply to the extra compensation "only to the extent that the additional service results in overtime for the entire day or trip or adds to overtime otherwise payable for hours required for the regular trip."

Under terms of the arbitration agreement the board's award becomes effective 60 days after the date (December 3) of its filing with the clerk of the United States District Court for the District of Columbia—"except on such carriers as may elect to preserve existing rules or practices . . . and so notify the authorized employee representatives on or before 30 days after the date on which such award is filed." On roads where it becomes effective, the new rule is to continue in effect until September 30, 1953, "and thereafter subject to notices served in accordance with Section 6 of the Railway Labor Act. . . . "

There were nine members of the arbitration board—three neutrals, three representatives of management, and three representatives of interested employees. The board's chairman, Paul N. Guthrie, was one of the neutral members, the other two having been William E. Simkin and A. Langley Coffey. Management representatives were F. J. Goebel, D. P. Loomis and F. K. Day, Jr. Employee representatives were Guy L. Brown, William C. Lash and W. D. Johnson.

The three labor members filed a dissenting opinion, and another came from one of the neutrals—Mr. Coffey.

## Equality of Regulation and Competition of Carriers Is No. 1 Economic Problem, Says P. H. Middleton

This country is confronted with a transportation problem so serious that unless it is solved on a basis of equality in regulation and competition among the various types of carriers, not only railroads but all other forms of transportation face danger of nationalization, according to P. Harvey Middleton, president of the Railway Business Association. Transportation, he said in a December 9 statement, is "the No. 1 economic problem which faces the new Congress." He added that continuation of our entire system of private enterprise depends upon its solution."

"If the privately owned and completely self-supporting railways," his statement said in part, "lose out in their struggle against their subsidized competitors, the first step would be nationalization of the railways, followed inevitably by the taking over of all other forms of transport. The subsequent pattern would be much the same as in other countries under similar conditions: socialism with all its attendant evils would soon be in

full control; commercial principles would be subordinated to political and bureaucratic considerations, and extravagance would replace efficiency and economy."

Mr. Middleton pointed out that laws for regulation of commercial transportation "date back to the days when the whistle of a steam locomotive and the clop-clop of horses' hoofs signified our only major methods of carrying goods and people in domestic commerce. . . . There have been many amendments to the Interstate Commerce Act. But despite all the patching of that well-worn instrument, and the best intentions of a highly respected Interstate Commerce Commission, it has failed to keep pace with the march of progress.

### Railway Solvency A National Asset

"There is no cheaper insurance for the nation as a whole than for the regulatory authorities to permit the railways to earn enough to maintain and improve their properties and pay a reasonable return to those whose money is needed to keep the railways going. The drying up of the sources of private capital because of poor earnings and unreasonable delays in rate adjustments, constitute a serious threat to railway solvency."

A subsidy to railroads themselves "is not the answer," Mr. Middleton said, but his statement outlined the "essentials" of a "program of remedial legislation," which included congressional declaration of "the need for adequate railway revenues"; faster action on rate increases required by increased costs; a rewording of the rule of rate making; I.C.C. power to review state action on service curtailments; publicity for contract carrier rates; repeal of the long-and-short-haul clause; dissolution of the Federal Barge Lines; charges for use of publicly provided highways, airways and waterways; I.C.C. approval of new waterway projects; and consideration of the effect on existing services of grants of authority for new services.

## Ten Months' Net Income Was $594 Million

Class I railroads in the first 10 months of 1952 had an estimated net income, after interest and rentals, of $594,000,000, an increase of more than $100,000,000 over the same period of 1951. Net income for the 10 months of 1951 was $492,000,000.

These figures, based on reports filed by the carriers, were compiled and made public by the Bureau of Railway Economics of the Association of American Railroads.

Net railway operating income in the 10-month period this year totaled $853,008,994, compared with $732,823,912 in the first 10 months of 1951.

Estimated results for October 1952 showed net income of $92,000,000, compared with $102,000,000 in October of last year. The October 1952 net railway operating income was estimated at $120,668,578. During the like month last year net railway operating income totaled $125,802,327.

In the 12 months ended with October, the rate of return averaged 4.24 per cent, compared with 3.75 per cent for the 12 months ended with October 1951.

Gross in the first 10 months of 1952 amounted to $8,738,353,866, an increase of 1.8 per cent over the 1951 period, when gross amounted to $8,586,370,241. Operating expenses in the 1952 period were $6,680,407,118, compared with $6,700,217,593, a decrease of 0.3 per cent.

Twenty Class I roads failed to earn interest and rentals in the first 10 months of 1952, according to the A.A.R. report.

| CLASS I RAILROADS—UNITED STATES | 1952 | 1951 |
|---|---|---|
| | Month of October | |
| Total operating revenues | $985,214,968 | $965,810,712 |
| Total operating expenses | 707,482,556 | 696,947,250 |
| Operating ratio—percent | 71.81 | 72.16 |
| Taxes | 139,823,853 | 124,998,764 |
| Net railway operating income (Earnings before charges) | 120,668,578 | 125,802,327 |
| Net income, after charges (estimated) | 92,000,000 | 102,000,000 |
| | Ten months ended October 31 | |
| Total operating revenues | $8,738,353,866 | $8,586,370,241 |
| Total operating expenses | 6,680,407,118 | 6,700,217,593 |
| Operating ratio—percent | 76.45 | 78.03 |
| Taxes | 1,052,093,753 | 984,057,603 |
| Net railway operating income (Earnings before charges) | 853,008,994 | 732,823,912 |
| Net income, after charges (estimated) | 594,000,000 | 492,000,000 |

**DETAILS of the St. Louis-San Francisco's new evening news broadcast are worked out by Clark Hungerford (left), president of the railroad, and Lindley Hines, a newscaster for station KMOX at St. Louis. The Frisco is sponsoring three 15-minute programs each week.**

## New Rules for I.C.C. Fourth Section, Suspension Boards

Special rules of practice governing procedures of its Board of Suspension and Fourth Section Board were adopted by the Interstate Commerce Commission, effective December 1.

One of the new rules provides that, when the Board of Suspension has declined to suspend a tariff, petitions for reconsideration may be filed not less than 10 days before the effective date of the tariff, and answers must be filed at least five days before such effective date. Presumably this contemplates more expeditious action on the part of the board, which, in the past, has not ordinarily acted 10 days in advance of the tariff's effective date.

Others of the new rules provide that proceedings of the two boards shall be informal, without records, subpoenas or oaths; and that petitions for reconsideration of the suspension of tariffs and of any action of the Fourth Section Board may be filed within 30 days of the service of notice of such action.

## Higher Reefer Rentals Become Effective Jan. 1

Increases in refrigerator car mileage rates paid by the railroads will become effective January 1. The rate on general-purpose reefers will go up from three cents per mile to 3.5 cents, while that on RB type reefers will be raised from 2.5 cents to 3.2 cents.

This has been announced by the Operating - Transportation Division of the Association of American Railroads.

The announcement followed approval of the increases by subscribers to the Bulwinkle-Act agreement covering per diem and demurrage, to whom the matter was submitted by letter ballot. It was reported erroneously in *Railway Age* of November 10, page 16, that only member roads of the A.A.R. had been asked to vote.

## California Blizzard Halts SP Streamliners

Northern California's "worst storm of the year" hurled a barrage of rain and snow at velocities reported at from 70 to 100 m.p.h. on December 7. Operation of the Southern Pacific's lines between San Francisco and Portland, as well as those of the Northwestern Pacific into north coastal California, were halted for more than 24 hours, as drifting snow buried rails as fast as they could be plowed.

The SP's "Shasta Daylight," a Seattle-bound convention special, the "Klamath" and the "Cascade" were halted at Dunsmuir, Cal., for more than 24 hours. Three other trains were halted at Klamath Falls, where the town was without electricity for several hours because power transmission lines were wrecked by wind. Snow plows ultimately cleared lines for the trains to continue; none of the estimated 1,370 passengers were reported discomfited by the storm.

## Over-Regulation Assailed At N.Y. RR Club Dinner

Government over-regulation of railroads, and usurpation of management functions by federal and state commissions, have damaged railroad earnings and are against the public interest, according to Thomas L. Parkinson, president of the Equitable Life Assurance Society.

Mr. Parkinson and the heads of three other large companies sharply criticized bureaucratic control of railroads in messages which were prepared for delivery at the 80th anniversary dinner of the New York Railroad Club on December 11. The others were H. P. Liversidge, chairman of the board of the Philadelphia Electric Company; Charles M. White, president of Republic Steel Corporation, and Don G. Mitchell, president of Sylvania Electric Products, Inc.

"Over-regulation," contended Mr. Parkinson, "has done its greatest harm by strait-jacketing rate making and abandonments of unprofitable services with the result that [railroad] earnings have been hurt, to the detriment of the public, because these curtailed earnings do not allow the roads to make full use of all available technological improvements. Interstate Commerce Commission rate prescriptions have been too little, too late and too inelastic to keep pace with rapidly rising labor and material costs and the receding purchasing power of the dollar. Insistence that unprofitable services be continued appear to have compounded the felony against earnings."

Mr. Liversidge's message ran along parallel lines. Bureaucratic expansion aimed at state socialism, he held, is imperilling railroads and other segments of our economy and enmeshing our business life in a tangle of rules and administrative orders. There is, he acknowledged, a need for reasonable regulation of public utilities. "But when governmental agencies assume the prerogative of management and exercise unlimited jurisdictional powers the result is not regulation. It is regimentation. Under such a system, management becomes subservient to a form of bureaucratic dictatorship."

Mr. White foresaw another great era ahead for railroads—"but it will not come until railroad people win for themselves a greater freedom to fight out their issues with one another, with business and with the public than they are permitted today." Mr. Mitchell said railroads should be relieved of restrictive regulations that hamper their ability to effect economies or to improve their service. "Regulation should be such that it encourages railroads to provide the best in standard transportation at lower cost than others can offer."

## Hiltz Outlines Four Ways To Cut Maintenance Costs

Railroad maintenance of way forces can achieve further substantial economies in their operations, J. P. Hiltz, Jr., engineer maintenance of way of the Delaware, Lackawanna & Western, told the New England Railroad Club on December 9.

These savings may be obtained, Mr. Hiltz said:

- By getting more production out of maintenance machinery, by improving such machinery and using it in new and better ways, by properly programming and scheduling it, and by maintaining it in such a way that "out of service" time is kept to a minimum;
- By obtaining the best materials available, using them in the proper manner, and conserving them to the greatest extent after they have been put in use;
- By using money allotted to maintenance work "to the best advantage of the property"; and
- By "selling" management on the idea that maintenance-of-way work is work which must be done "as long as a wheel rolls on the rails," that this work should be done at certain indicated times for the preservation of the property, and that it can only be done properly and economically if money is allotted to the maintenance department in such a way that competent engineering supervision can work out long-range programs.

## Freight Car Loadings

Loadings of revenue freight in the week ended December 6 totaled 719,159 cars, the Association of American Railroads announced on December 11. This was an increase of 48,992 cars, or 7.3 per cent, compared with the previous holiday week; a decrease of 54,371 cars, or 7 per cent, compared with the corresponding week last year; and a decrease of 47,736 cars, or 6.2 per cent, compared with the equivalent 1950 week.

Loadings of revenue freight for the week ended November 29 totaled 670,167 cars; the summary for that week, compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, November 29

| District | 1952 | 1951 | 1950 |
|---|---|---|---|
| Eastern | 112,210 | 138,390 | 119,343 |
| Allegheny | 141,955 | 167,691 | 116,232 |
| Pocahontas | 51,427 | 66,956 | 54,106 |
| Southern | 115,938 | 140,802 | 134,764 |
| Northwestern | 88,365 | 105,074 | 108,113 |
| Central Western | 107,447 | 136,051 | 139,686 |
| Southwestern | 52,825 | 66,812 | 67,921 |
| Total Western Districts | 248,637 | 307,937 | 315,720 |
| Total All Roads | 670,167 | 821,776 | 740,165 |
| Commodities: | | | |
| Grain and grain products | 39,011 | 58,694 | 55,022 |
| Livestock | 9,003 | 10,950 | 11,809 |
| Coal | 126,683 | 175,456 | 132,607 |
| Coke | 14,477 | 16,974 | 11,931 |
| Forest products | 39,288 | 47,556 | 47,122 |
| Ore | 43,455 | 41,672 | 34,589 |
| Merchandise l.c.l. | 62,174 | 73,669 | 79,408 |
| Miscellaneous | 336,076 | 396,805 | 367,677 |
| November 29 | 670,167 | 821,776 | 740,165 |
| November 22 | 810,922 | 711,447 | 701,551 |
| November 15 | 828,723 | 814,258 | 837,458 |
| November 8 | 829,198 | 791,403 | 839,880 |
| November 1 | 862,012 | 837,617 | 863,149 |
| Cumulative total 48 weeks | 35,311,988 | 37,799,088 | 36,013,019 |

**In Canada.**—Carloadings for the 10-day period ended November 30 totaled 95,284 cars, compared with 85,855 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

| | Revenue Cars Loaded | Total Cars Rec'd from Connections |
|---|---|---|
| Totals for Canada: November 30, 1952 | 95,284 | 36,446 |
| Cumulative Totals November 30, 1952 | 3,833,508 | 1,620,807 |

## Post-Strike Iron Ore Traffic Sets Record

Since the end of the steel strike last summer, the railroads have hauled more iron ore than in any similar period in their history, Arthur H. Gass, chairman of the Car Service Division of the Association of American Railroads, said in a December 4 statement.

Between August 3 and November 29, a total of 1,490,934 cars of iron ore was moved by the railroads, an increase of 19.3 per cent over the 1,249,761 cars moved in the same period of 1951, Mr. Gass declared. In this time, average weekly loadings of ore were approximately 90,000 cars, he added.

In this 17-week period, the railroads moved more than 52,288,000 tons of ore from mines in the Lake Superior region to the head of the Great Lakes for shipment by boat to lower lake points, Mr. Gass stated. These shipments amounted to more than 3,000,000 tons each week. While complete figures are not yet available, the Ore & Coal Exchange estimates a total of slightly more than 75,000,000 gross tons of iron

**THIS GOLD BOX CAR AWARD was presented to Santa Fe Division Freight Agent O. C. Honig (center) in recognition of outstanding freight sales work in behalf of the road's Beaumont (Tex.) office. The award highlighted a recent staff meeting of Santa Fe freight representatives in Texas and Mexico. Presentation was by Clark Davis (on Mr. Honig's left), freight traffic manager, Galveston, as J. A. Dana, general freight agent, Galveston, F. E. Benton, traveling agent, Beaumont (both on left), and F. H. Rockwell, general freight traffic manager, Chicago (on right), look on.**

ore will have been transported down the Great Lakes between the opening of navigation early in April and the departure of the last boat from the Duluth-Superior docks on December 4, Mr. Gass said.

The C. S. D. chairman pointed out that the railroads were called upon to move a substantially increased tonnage of iron ore entirely by rail immediately following the 55-day steel strike to assist in building up stockpiles to assure winter steel production after the closing of shipping on the Great Lakes.

"Now that the shipping season has closed on the Great Lakes, the railroads with their all-weather transportation service will continue to move ore directly from mines to steel mills, but because of the success achieved in building stockpiles, this all-rail movement of ore will probably not be as large as originally thought," Mr. Gass declared.

He added that "the apprehension that existed earlier that ore shortages might cause the closing of mills prior to the opening of spring navigation on the Great Lakes has been entirely allayed."

## Railroads Seek Dismissal Of Lincoln Antitrust Case

Western railroads and the Association of American Railroads on December 5 filed a motion for dismissal of the so-called Lincoln case, which involves the federal government's antitrust complaint against them. The motion was filed in the federal district court at Lincoln, Neb., where the case is pending.

The government's complaint alleges that the defendants were parties to various agreements, with respect to rates and services, which violated the antitrust laws. The court proceedings have been held in abeyance since October 1950. The court granted an indefinite continuance at that time, when the United States Supreme Court dismissed Georgia's like complaint against eastern and southern railroads and the railroads had pending before the Interstate Commerce Commission their application for approval of rate-procedures agreements under Section 5a of the Interstate Commerce Act.

In their December 5 motion to dismiss, the railroads said that charges to the effect that joint actions with respect to rates were unlawful had been identified by Department of Justice attorneys as the "heart" of the Lincoln case. But passage of the Bulwinkle-Reed Act, which added Section 5a to the I.C. Act, and I.C.C. orders approving the railroads' Bulwinkle-Act agreements, "have relieved defendants from operation of the antitrust laws in respect to such rate activities," and, "upon the facts and the law," the government "has shown no right to relief," the motion also said.

As to the complaint's charges and allegations concerning matters other than rates, the motion had this to say: "Plaintiff's evidence shows that the conduct alleged and relied upon by it as to such matters has either been abandoned or is shown to have occurred so long prior to the institution of this suit in 1944 that such evidence is stale, that it has no present probative value or significance and is insufficient in law to support injunctive relief."

The motion went on to recall that the Lincoln court had said in 1945 that the "object and basic averments" of the Georgia case were "so strikingly comparable" to those of the Lincoln case that action by the U. S. Supreme Court in the former would be "compellingly persuasive, if not absolutely controlling, in the present instance." The motion then closed with this assertion: "The record requires the dismissal of the complaint and the public interest will be fully protected by a dismissal without prejudice."

## G. C. Randall Addresses N.Y. Chapter of N.D.T.A.

George C. Randall, manager port traffic of the Association of American Railroads, was guest speaker at the December 4 meeting of the New York Chapter of the National Defense Transportation Association. Mr. Randall, in a discussion of "Railroad Progress in Connection with Port Transportation," outlined changes in handling traffic through ports in recent years, with special emphasis on evolution of methods and equipment.

## Truman Names Referee on "Improvement" Wage Raise

Representatives of railroad managements and employees began discussions of "improvement factor" wage increases in Washington, D. C., last week. The negotiations were conducted by Paul N. Guthrie, a referee appointed by President Truman.

Mr. Guthrie got this assignment just as he completed work as chairman of an arbitration board which made a December 3 report prescribing a more-than-one-class-of-service rule covering road-service employees.

## Holiday Travelers Get Advice from Knudson

Defense Transport Administrator James K. Knudson issued a December 9 statement to advise civilian travelers to schedule their holiday journeys so

### *CAR SURPLUSES, SHORTAGES*

**Average daily freight car surpluses and shortages for the week ended December 6 were announced by the Association of American Railroads on December 11 as follows:**

| | Surplus | Shortage |
|---|---|---|
| Plain Box | 1,185 | 893 |
| Auto Box | 0 | 18 |
| Total Box | 1,185 | 911 |
| Gondola | 428 | 309 |
| Hopper | 1,092 | 91 |
| Covered Hopper | 46 | 48 |
| Stock | 1,090 | 0 |
| Flat | 304 | 173 |
| Refrigerator | 1,510 | 0 |
| Other | 247 | 0 |
| Total | 5,902 | 1,532 |

as to avoid, if possible, travel during the period from December 20 through 22 and over week-end of January 2-5.

Mr. Knudson noted that the military leave period will fall between December 20 and January 5. "The Department of Defense," he said, "is to be commended for staggering dates of servicemen's holiday leave in an effort to eliminate any undue congestion at transportation terminals."

Nevertheless, the D.T.A. administrator expected that civilian travel "may still create some problems" because many concerns are observing a four-day Christmas holiday.

## Christmas Mail Traffic Will Be Above Last Year

The railroads will be called upon by the Post Office Department this month to move an estimated 5,765,315,000 pieces of Christmas mail, an increase of more than five per cent over the same period last year, according to the Association of American Railroads.

If equally distributed among the entire population of the United States, the number of pieces of intercity mail earmarked for movement by rail during the December 1-25 period would give every American, including members of the armed forces serving abroad, more than 36 gifts and greeting cards, according to the Post Office Department.

To haul this large volume, the railroads, which normally move about 99 per cent of all non-local parcels and letters, must provide 3,768,190 feet of mail car space, postal officials estimate. This footage is equivalent to 62,800 standard-size mail cars over 60 feet in length. If loaded simultaneously, the cars would be sufficient to make up more than 5,230 mail trains consisting of 12 cars each.

The number of sacks of mail to be handled by the railroads this month, according to postal computations, will total 56,522,700, an increase of 2,850,300 sacks over the Christmas season last year.

Due to an acute shortage of floor space at many of the larger post offices and terminals, the railroads must accelerate the delivery of holiday mail this month, pressing into service extra cars capable of handling the Christmas mail wherever necessary, postal officials point out. In addition to expediting letters and parcels, the railroads during the 25-day peak period will be moving thousands of cars of express and freight loaded with Christmas merchandise, the A.A.R. said.

## Agents Selling Transport By Air Warned by C.A.B.

Air transportation ticket agents have been warned by the Civil Aeronautics Board against engaging in trade prac-

(*Continued on page 66*)

# ORGANIZATIONS

At the recent annual meeting of the **Diesel Engine Manufacturers Association,** held in New York, the following officers were elected for 1953: President, A. W. McKinney, executive vice-president, National Supply Company, Pittsburgh; vice-presidents, Walter A. Rentschler, vice-president, Baldwin-Lima-Hamilton Corporation, Philadelphia, and William E. Butts, president, Enterprise Engine & Machinery Co., San Francisco; treasurer, Robert H. Morse, Jr., president, Fairbanks, Morse & Co., Chicago; and secretary and executive director, Harvey T. Hill, Chicago.

The annual dinner of eastern Pennsylvania members of the **Transportation Association of America** was held in the Bellevue-Stratford Hotel, Philadelphia, on December 10. Revelle W. Brown, chairman of the executive committee of the Reading, a director of the T.A.A., and general chairman of its Central Atlantic forum, presided. About 200 business and financial leaders of Philadelphia attended the dinner, which was addressed by Donald D. Conn, executive vice-president of the association.

Two forthcoming luncheons for the association are being sponsored by Ernest E. Norris, chairman of the Southern. The first will be at the Wm. Barringer Hotel, Charlotte, N.C., on December 16, and the second at the Poinsett Hotel, Greenville, S.C., on December 18. Mr. Conn will address both luncheons.

Livingston Goddard, secretary-treasurer of the **Federation for Railway Progress** since 1947, has been appointed vice-president; Clifford H. Ramsdell, editor of Railway Progress magazine, has been appointed secretary-treasurer to succeed Mr. Goddard. Both appointments have been made pending the annual election of officers. Gordon Huffines, assistant editor of Railway Progress, has been promoted to managing editor.

**TRAFFIC TIP** *Fill out and hand to your supervisor*

_____ *(date)*

I understand that _____
*(name of prospective customer)*

whose address is _____

☐ may ship some freight ) to _____

☐ may make a trip ) from _____

☐ may locate a new plant

*(Please sign your name)* _____

*(Position)* _____

*(Location)* _____

**THE NEW YORK CENTRAL is handing out, experimentally, these Traffic Tip cards to employees. A coupon, similarly composed, printed in the road's magazine, Headlight, got such good results that it was decided to carry the idea a step farther and issuance of the cards followed.**

# EQUIPMENT AND SUPPLIES

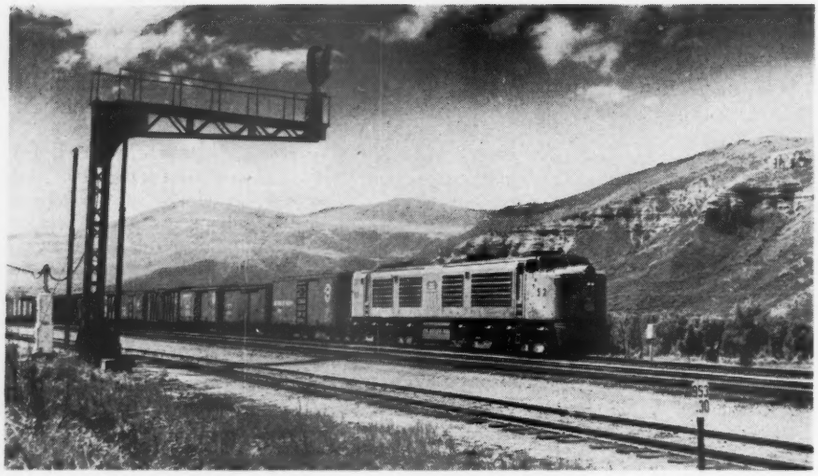
## CNR Orders Equipment Costing $34,248,000

The Canadian National has ordered 3,760 freight-train cars and 30 passenger-train cars costing $34,248,000. Thirty 76-ft. baggage cars will be built by the National Steel Car Corporation. The freight-car orders were placed as follows: National Steel Car—1,000 70-ton ore, 200 50-ton refrigerator, 150 70-ton covered hopper, and 50 30-ton refrigerator cars; Canadian Car & Foundry Co.—1,200 50-ton box, 150 30-ton flat, and five 135-ton depressed center flat cars; Eastern Car Company—500 70-ton gondola, 300 70-ton triple hopper, 100 30-ton box, and 30 50-ton air dump cars; and Marine Industries, Ltd.—75 40-ton gondola cars.

### *FREIGHT CARS*

## 5,929 Freight Cars Delivered in November

New freight cars delivered in November for domestic use totaled 5,929, reflecting a slight increase in the amount



**ONE OF THE SIX gas turbine electric locomotives now in service on the Union Pacific between Ogden, Utah, and Green River, Wyo. The road has ordered 15 more of the power units from the General Electric Company (see Equipment & Supplies, Locomotives, below), which, with the four locomotives yet to be delivered of the original order for 10, will increase the UP's roster of this type of motive power to 25 units.**

of steel available, the American Railway Car Institute and the Association of American Railroads have announced jointly. October deliveries amounted to 5,437. Deliveries in November 1951 were 9,824.

New freight cars ordered in November aggregated 2,878, the announcement added, and the backlog of cars on order on December 1 was 87,657.

A breakdown by types of cars ordered and delivered in November and of cars on order on December 1 appears in the accompanying table.

| Type | Ordered Nov. '52 | Delivered Nov. '52 | On Order & Undelivered Dec. 1, '52 |
|---|---|---|---|
| Box—Plain | 25 | 1,385 | 22,422 |
| Box—Auto | 0 | 1 | 749 |
| Flat | 0 | 135 | 3,765 |
| Gondola | 75 | 1,346 | 19,675 |
| Hopper | 232 | 1,964 | 22,805 |
| Covered Hopper | 1,400 | 263 | 6,613 |
| Refrigerator | 0 | 309 | 3,726 |
| Stock | 0 | 180 | 0 |
| Tank | 130 | 315 | 6,090 |
| Caboose | 16 | 4 | 186 |
| Other | 1,000 | 27 | 1,626 |
| TOTAL | 2,878 | 5,929 | 87,657 |
| Carbuilders | 2,466 | 4,032 | 52,254 |
| Railroad Shops | 412 | 1,897 | 35,403 |

The **Chicago Heights Terminal Transfer** has ordered 25 50-ton box cars from the American Car & Foundry Co.

The **Gulf, Mobile & Ohio** has ordered 100 50-ton pulpwood cars from its own shops for delivery in the second quarter of 1953.

The **New York, New Haven & Hartford** has ordered 100 40-ft. flat cars from its Maybrook, N.Y., shops at an estimated cost of $8,500 each. The cars will be used in the road's trailer-on-flat-car service. Construction is expected to begin in January and the first cars are to be completed in February.

The **Reading** has ordered 100 50-ton pulpwood cars from the Bethlehem Steel Company at a cost estimated to be between $800,000 and $850,000. Delivery is scheduled for September 1953.

The **St. Louis Southwestern** has ordered 75 70-ton gondola cars from the Bethlehem Steel Company at an estimated cost of $525,000. Delivery is scheduled for July 1953.

### LOCOMOTIVES

## UP Orders 15 More Gas Turbines, 54 Diesels

The Union Pacific has ordered 15 additional gas turbine electric locomotives from the General Electric Company and 54 diesel units from the Electro-Motive Division of General Motors Corporation. The order for diesel locomotives includes eight "A" and 14 "B" 2,250-hp. passenger units, 10 1,500-hp. road-switchers and 22 1,200-hp. yard switchers, all for 1953 delivery.

Delivery of the new gas turbine locomotives is scheduled to begin early in 1954. Six units of the original order for 10 such locomotives have been delivered and the remaining four are scheduled for delivery next year. The 25 locomotives will involve an expenditure of over $14,000,000. Like their predecessors, each of the 15 additional gas turbine locomotives will develop 4,500 hp. They will be about 83 ft. long and will pull a heavily loaded freight train at speeds up to 65 m.p.h.

### PASSENGER CARS

The **Atlanta & West Point** has ordered one 58-passenger coach from the Budd Company at an estimated cost of $142,000. The car, delivery of which is scheduled for the third quarter of 1953, will be used in the "Crescent Limited" between Atlanta, Ga., and New Orleans.

The **Chicago, Rock Island & Pacific** has ordered seven railway post office cars and five baggage cars from the Budd Company, to be assigned to the "Golden State" and trains of the streamlined "Rocket" fleet, as required. The R.P.O. cars will be 63½ ft. long from coupler to coupler. The baggage cars will be equipped to accommodate a train baggageman.

### MISCELLANEOUS

The **New York Central** has ordered 11 Matisa tie-tamping machines from the Matisa Equipment Corporation, at a reported cost of approximately $580,000.

# SUPPLY TRADE

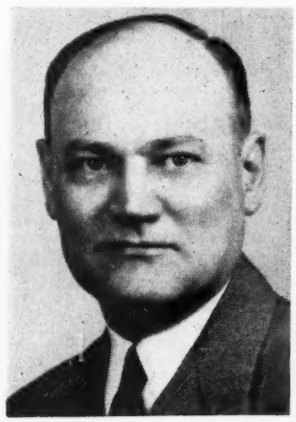
**Walter P. Arnold,** formerly vice-president and executive assistant to general manager of the Wood Preserving division of **Koppers Company,** has been appointed vice-president and general manager of the division to succeed **Harry R. Condon,** who has retired after 25 years of service.

Mr. Arnold joined Koppers as a chemical engineer in 1925, and 10 years later became technical director for the division. He was transferred to Pittsburgh in 1946 as manager of railroad sales for the division and in 1950 was made executive assistant to vice-

**J. Gordon Cavanagh has been appointed sales engineer of the Copperweld Steel Company's Wire and Cable division, covering the lower peninsula of Michigan and all of Indiana. His headquarters will be in Detroit, as were those of his predecessor, Donald T. Jones, who is on leave of absence for service with the U.S. Navy.**

**John E. Angst, whose appointment as assistant western sales manager of the American Car & Foundry Co., at Chicago, was reported in *Railway Age*, December 1, page 18.**

president and general manager. He was appointed to a divisional vice-



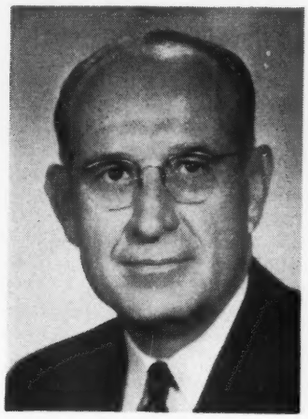
**Walter P. Arnold**

presidency in 1951. In his new position, Mr. Arnold will be responsible for all

**Jack H. Gill, who has been appointed assistant manager of the industrial division of the general sales department of Caterpillar Tractor Company, Peoria, Ill.**

wood preserving activities of Koppers, including operation of 22 wood preserving plants throughout the country.

**Charles Rager,** district manager of **Fairmont Railway Motors, Inc.,** at St. Louis, has been appointed district manager at Chicago. Succeeding



**Charles Rager**

Mr. Rager is **George Adams,** former sales representative at Chicago. Mr. Rager has been associated with Fairmont since 1939, and was a representative at Chicago before being appointed district manager at St. Louis in 1946.

Mr. Adams joined Fairmont in 1935. He served at Fairmont, Minn., for two

**George Adams**

years and was later transferred to Washington, D.C.

The United States Steel Supply division of the **U.S. Steel Corporation** has appointed **John P. Connor** as district manager at Houston, Tex. Mr. Connor attended the University of Alabama, began his business career in 1937 in the general sales office of U.S. Steel's Tennessee Coal & Iron division at Birmingham, and during World War II served as a captain in the Army Air Forces. He returned to the T. C. & I. as a sales representative at New Orleans in 1946, was transferred to Dallas in 1948, and from 1949 until his present appointment was a sales representative at Fort Worth.

**Douglas Grymes, Jr.,** has been appointed manager of railroad sales

**Douglas Grymes, Jr.**

for the Wood Preserving division of the **Koppers Company.** Mr. Grymes has been assistant manager of railroad sales for the past three years. In his new post he will have supervisory responsibility for sale to railroads of ties, lumber and timber pressure-treated at the division's 22 plants.

### *OBITUARY*

**T. F. Scholes,** president of T. F. Scholes, Inc., railway contracting firm of Reading, Pa., and president of the Associated Railway Track Contractors of America, died on November 23 when his private plane crashed while enroute from Reading to Camden, Ark.

## CONSTRUCTION

### UP to Spend $4 Million On New Kansas City Yards

Surveying has begun on a $4-million program to expand Union Pacific yard facilities in Kansas City. New yards, to go in west of 18th street, will contain 165,330 feet of track, and 37,280 feet of track will be added to present facilities. The new yard will be used in connection with eastbound traffic only. Westbound traffic will be handled in the present yard. It is expected that actual construction will get under way late this winter or in early spring.

### D.T.A. Lists 1st Quarter Construction Approvals

Authority for the Union Pacific to work on a $14,750,000 line-relocation project during the first quarter of 1953

has been granted by the Defense Transport Administration. This project, at Cheyenne, Wyo., was among 116 which D.T.A. approved for construction in the first three months of next year.

Approval by D.T.A. authorizes allotment of controlled materials. Some of the approved projects are already under way, while work on others is scheduled to begin during the first quarter.

The estimated total cost of the 116 projects approved is $39,697,701. They include projects in all fields of domestic transportation over which D.T.A. has jurisdiction—railroad, street and highway, inland waterways, warehousing and storage, and port utilization.

Other large railroad projects, in addition to that of the UP, include the following:

**Beaumont, Sour Lake & Western,** relocation of line over San Jacinto reservoir, $2,155,410.

**Chicago, Milwaukee, St. Paul & Pacific,** classification yard at Bensenville, Ill., $2,222,429.

**Chesapeake & Ohio,** diesel servicing facilities, $773,850; construction of track to serve mine at Accoville, W. Va., $324,100; car thawing plant at Toledo, Ohio, $330,000.

**New York, New Haven & Hartford,** passenger train shed at Providence, R.I., $550,000. Here the applicant for authority was the Gilbane Building Company, which will construct the facilities for the New Haven.

**Norfolk & Western,** construction of spur track at Portsmouth, Ohio, $595,000.

**St. Louis Southwestern,** centralized traffic control between Dexter Junction, Ark., and Jonesboro, $968,000.

**Southern Pacific,** construction of additional tracks at Kaiser, Calif., $304,370.

**Wabash,** freighthouse facilities at Kansas City, Mo., $398,330.

# FINANCIAL

## Santa Fe Creates Bond Retirement Fund

A "Voluntary Bond Retirement Fund," which will be used in meeting 1995 maturities of the company's bonded debt, has been created by directors of the Atchison, Topeka & Santa Fe.

"Since the era of widespread railroad insolvency," said President Fred G. Gurley in announcing establishment of the fund, "we have gone through three distinct periods with reference to Santa Fe indebtedness:

(1) Depression years — 1933-1940 — when debt increased from $309.6 million to $334.5 million due to the necessity of borrowing to finance modest programs for purchase of new equipment.

(2) Wartime years—1941-1945—when all callable bonds were eliminated and some reduction effected in equipment obligations. Total debt was reduced to $230.5 million by the end of 1945.

(3) Postwar period — 1946-1951 — when expenditures for modernization and improvement were financed primarily by cash, and debt represented by equipment obligations was reduced to a low figure.

"We are now in a fourth period," he continued. "With callable bonds eliminated and equipment obligations nearing elimination, some new measure is needed to make further progress in this program."

Detailing the road's total funded debt of $203,552,496, Mr. Gurley explained that its 4 per cent general mortgage bonds, totaling $150,867,500, due October 1, 1995, and its 4 per cent adjustment bonds, totaling $48,792,500, due July 1 1995, were created at the time of the company's reorganization, with no sinking fund provisions and no provisions for calling either issue at any time prior to maturity. [The balance of the Santa Fe's funded debt consists of $3,892,496 of equipment trust certificates, which will be wholly retired by 1955.]

"This [bonded] debt [totaling $199,600,000] is a large amount to become payable all in one year," he added. "It is not possible to predict what economic conditions may prevail in 1995, and without some measure of protection in the form of substantial reserves, both management and stockholders could be confronted with a serious problem."

Therefore, he said, the directors "deemed it prudent and desirable to begin setting aside relatively small sums each year to provide a protective reserve." An initial appropriation of $1,213,530 was made into the fund from income and an arrangement set up whereby there shall be appropriated to that reserve twice each year an amount equal to the lesser of (a) 25 cents per share of outstanding common stock (equal to 50 cents per share per annum), or (b) 20 per cent of total dividends declared on the common stock during the preceding six months.

Funds so appropriated, and accruing interest and other income on the bond retirement fund, will from time to time be invested in (a) the company's outstanding bonds, (b) any bonds of other companies which are guaranteed in whole or in part by the Santa Fe, (c) U.S. government securities, or (d) any other securities which may be approved for the purpose by the directors.

"You will appreciate," Mr. Gurley's statement concluded, "that it is not possible to predict the end result of this fund. If conditions between now and 1995 are favorable, the fund should retire almost all of the debt due at that time. To the extent that some of the intervening years are unfavorable, there would, of course, be less money in the fund."

**Canadian Pacific.**—*Sale of Bonds.*—Through a Canadian investment syndicate headed by A. E. Ames & Co. and Wood, Gundy & Co., the CPR has sold, at par and accrued interest, $35 million of convertible 4 per cent collateral trust bonds, maturing in 1969. The bonds will be convertible between June 1, 1953, and June 1, 1960, into ordinary stock of the company, at the rate of 30 shares for each $1,000 of bonds.

## Dividends Declared

**ALLEGHENY & WESTERN.**—$3, semiannual, payable January 2, 1953, to holders of record December 20.

**CANADIAN PACIFIC.**—75¢, payable in Canadian funds February 27, 1953, to holders of record December 30.

**CHICAGO, BURLINGTON & QUINCY.**—$4, payable December 29 to holders of record December 18.

**CHICAGO, ROCK ISLAND & PACIFIC.**—common $1, quarterly; preferred A $1.25, quarterly, both payable December 26 to holders of record December 12.

**CHICAGO SOUTH SHORE & SOUTH BEND.**—25¢, quarterly, payable December 15 to holders of record December 5.

**COLORADO & SOUTHERN.**—4% first preferred, resumed, $2, payable December 29 to holders of record December 18.

**DELAWARE.**—$1, semiannual, payable January 2, 1953, to holders of record December 15.

**ELMIRA & WILLIAMSPORT.**—7% preferred, $1.65, semiannual, payable January 2, 1953, to holders of record December 19.

**MINNEAPOLIS & ST. LOUIS.**—25¢, quarterly, and 10¢ extra, both payable December 22 to holders of record December 12.

**PITTSBURGH, FORT WAYNE & CHICAGO.**—common, $1.75, quarterly, payable January 1, 1953, to holders of record December 10; 7% preferred, $1.75, quarterly; payable January 6, 1953, to holders of record December 10.

**ROCHESTER & GENESEE VALLEY.**—$2, semiannual, payable January 2, 1953, to holders of record December 20.

## Security Price Averages

| | Dec. 9 | Prev. Week | Last Year |
|---|---|---|---|
| Average price of 20 representative railway stocks | 67.82 | 66.81 | 54.84 |
| Average price of 20 representative railway bonds | 95.13 | 94.41 | 90.14 |

## New Securities

Division 4 of the I.C.C. has **authorized:**

**NORTHERN PACIFIC.**—To assume liability for $6,375,000 of equipment trust certificates to finance in part 1,250 freight cars and eight diesel units (*Railway Age*, November 24, page 65). Division 4 approved sale of the certificates for 99.149—the bid of Halsey, Stuart & Co. and 12 associates—which will make the average annual cost of the proceeds to the road approximately 3.03 per cent. The certificates, dated December 16, will mature in 15 annual installments of $425,000 each, beginning December 16, 1953. The certificates were reoffered to the public at prices yielding from 2.2 to 3.05 per cent, according to maturity.

**ST. LOUIS-SAN FRANCISCO.**—To assume liability for $2,805,000 of series K equipment trust certificates to finance in part 550 freight cars costing an estimated $3,512,769 (*Railway Age* of November 10, page 72). Division 4 approved sale of the certificates for 99.4243—the bid of Salomon Brothers & Hutzler and three associates—which will make the average annual cost of the proceeds to the road approximately 2.98 per cent. The certificates, dated December 1, will mature in 15 annual installments of $187,000 each, beginning December 1, 1953. The certificates were reoffered to the public at prices yielding from 2.2 to 3 per cent, according to maturity.

# RAILWAY OFFICERS

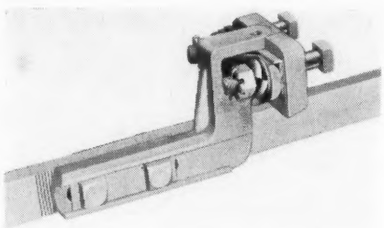
### *EXECUTIVE*

**Pierre Dumaine** has been appointed president of the NEW ENGLAND TRANSPORTATION COMPANY, highway subsidiary of the NEW YORK, NEW HAVEN & HARTFORD, at Boston, succeeding **Howard F. Fritch,** who died on October 17. Mr. Dumaine was for many years associated with the Waltham Watch Company and the Amoskeag Company.

(*Continued on page* 63)

## New Switch Rod

The Type "MJ" adjustable vertical switch rod, which permits a 3-in. overall adjustment, has been introduced by the Ramapo Ajax division of the American Brake Shoe Company, Chicago. This adjustment, it is said, allows the rod to be used in various switch designs for both head and back rods, thus simplifying installation and allowing the exact throw to be readily obtained.



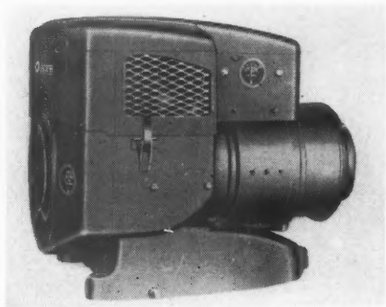
**The clip assembly of the new switch rod.**

The new rod is patterned essentially after the company's Type "M" design and is furnished with extra strong clips having serrations that correspond with those of the heavy 2½-in. by 1¼-in. rod. The teeth of these serrations are larger and deeper than normally used in switch rods, there being six per inch machined with rounded roots and tips.

The rod and clip assemblies are said to be sufficiently strong to permit the use of the "MJ" design at the busiest locations in heavy-duty hand, machine or spring-operated switches.

## Emergency or Standby Power Source

A 3,500-watt a.c. electric generating plant with a 4,000-watt, 2-hour overload capacity has been announced by D. W. Onan & Sons, Inc., Minneapolis, Minn. The Model 305CK unit has been designed to meet the demand for higher capacity in small-sized electric plants. It produces 115-volt, 60-cycle current and is powered by the Onan "CK," two-cylinder, four-cycle, air-cooled gasoline engine. An engine improvement gives this model rated output of 500 watts more than similar Onan "CK". powered models.



**The Model 305CK unit.**

Voltage regulation is plus or minus 3 per cent. The engine delivers its full rated load with a fuel consumption of 0.68 gal. per hr. Extra large main bearings and sturdy rod and crankshaft assure long life service. The revolving armature generator is direct-connected to the engine.

## Snow Plow Attachment

A readily detachable snow plow unit designed for use on all Clark pneumatic-tired fork trucks except the 1,000-lb. "Truckloader," has been announced by the Clark Equipment Company, Battle Creek, Mich.

The plow is a non-hydraulic attachment which is adjusted manually to several blade angles, and which is mechanically adaptable to uneven ground surfaces. The ballast box portion of the attachment goes directly over the forks and may be loaded with any suitable material to provide drive-wheel traction. The blade is 3/16-inch thick and 23½-inches high, and is attached to the plow assembly by a single vertical pin around which the blade may be rotated for angle adjustment. A compression coil spring acts as a shock absorber.

The snow plow is readily detachable, and requires no tools for mounting or dismounting. Two metal legs at the base of the plow assembly permit it to be stored in an upright position. Although primarily designed for snow removal, the plow may also be used for grading, back-filling and similar light yard maintenance operations.

## Dimmers for Fluorescent Lamps

A practical system for dimming fluorescent lamps smoothly and efficiently has been announced by General Electric lighting engineers at Nela Park, Cleveland, Ohio. The brightness of fluorescent lamps can be controlled merely with the turn of a knob, as smoothly and easily as incandescent lamps have been dimmed or brightened in the past.

The control will be available for use with either the conventional 40-watt preheat type lamp, or with the new 40-watt Rapid-Start fluorescent lamps.

Two sizes of controls will be made, one operating up to eight lamps, and the other up to 35 lamps. They can be turned on instantly at any point in the dimming range, and may be dimmed from maximum brightness until they produce practically no light at all, and then may be brightened in the same manner.

They maintain their original color during the dimming process, while the light of filament lamps turns increasingly red.

# Smooth dining on Armco wheels

Some people seem to eat for free, but it's because they have the right equipment. Today, more than ever, proved equipment like Armco Wrought Steel Wheels is necessary for modern trains. Higher speeds mean quicker stops—and an increasing need for wheels that will withstand severe braking under passenger cars and the high and complex stresses imposed by Diesel service.

Here is why you can rely on Armco wheels. Seventeen years ago an intensive, permanent program of wheel research was set up. Since then, special laboratory tools have been developed to simulate—and even exceed—the most punishing service conditions.

For example, to study the effects of severe braking, one testing machine brakes a wrought steel wheel at 120 m.p.h. to a stop in 15 seconds, with 20,000 pounds of pressure on each brake shoe. Hundreds of such tests on wheels of different analyses and heat treatment have provided invaluable data.

This never-ending research work, along with the experience of 44 consecutive years of wheel-making, is responsible for the present Armco Wrought Steel Wheel. Latest methods of quality control, from melting of the steel to final heat treatment, insure uniformity from wheel to wheel—offer you greater peace-of-mind.

It will pay you to investigate Armco Wrought Steel Wheels. Just get in touch with our nearest District Office or write us at the address below.

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ARMCO

## Shows Railroad Freight Capacities at a Glance!

# U. S. RAILROADS MAP

Prepared by
PROFESSOR EDWARD L. ULLMAN
UNIVERSITY OF WASHINGTON

- CLASSES ROADS BY LOAD CAPACITIES
- SIZED 34x44 INCHES FOR WALL OR DESK USE
- PRINTED IN 3 COLORS, FOR EASY READING
- ACCURATE, COMPREHENSIVE, MODERN

**A Unique Idea in Maps**

You'll certainly want a copy of this remarkable map of U. S. railroads. Nothing like it has ever been devised. Prepared under the direction of Professor Edward L. Ullman, University of Washington, it combines the unique advantages of a map with the simplicity and information of a graph. It shows you U. S. railroads from an entirely different and important viewpoint.

**Classifies Roads by Capacities**

Consider the convenience of having reliable information of this sort instantly available. A glance at the map shows you all major U. S. railroads divided into these six classifications: three and four track roads, double track roads, single track roads with centralized traffic control, single track roads with automatic signal installations, other important single track roads, all other trackage. Electrification is also shown. In every case, carefully verified data were used. Thus, the map is not only the first of its kind, but also one of the most modern and accurate U. S. railroad maps available.

**Size, Color Make Map Easy to Read**

Nearly three feet high by four feet wide, the map is ideally suited for display and use on wall or desk. Trackage is shown in dark blue; railway names, state boundaries, and major cities in grey; water areas in light blue; and special symbols in red. The combination of size and three-color printing on white paper makes it simple for you to tell instantly the traffic potentialities of roads in any section of the United States. The research, the expert knowledge, the painstaking labor, and expensive production represented in this map make it an outstanding value at only $2.50. Once you experience the convenience of using it, you'll say it's the most useful map you've ever owned. Order yours today.

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Please send me for Free examination a copy of U.S. RAILROADS MAP. If after 10 days I am not completely satisfied, I will return the map and owe nothing. Otherwise, I will remit the price of $2.50 plus a few cents for postage and handling.

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# Benchmarks and Yardsticks

PEOPLE WITH A SENSE of responsibility for the welfare of the railroads might well give some time to reflecting upon how seriously this industry is disadvantaged by the lack of competent and up-to-date textbooks on most phases of railroad work.

The problem does not lie in the field of the publishing business. A comprehensive and acceptably authoritative text on railroad operation, or accounting, or mechanical practices, or maintenance of way, or labor relations or other departmental procedure ought to sell sufficient copies to reimburse the publisher, even though it could not possibly enrich him. The problem lies, rather, in getting competent authors to write such books.

If a book sells three or four thousand copies at a price of $5 or $6, the normal royalties the author could expect would range from $1,500 to $2,400. Producing such a text would probably consume a full year of a man's time, and there aren't very many people, probably, who could write such authoritative texts whose time is worth less than $10,000 a year—if not considerably more.

Under such circumstances, strictly commercial considerations are not likely to produce books of this kind. The authors, if they are to be found, will probably have to be retired people or people of independent means who would be willing and able to put in a lot of time just for love of the thing, and without expecting adequate monetary reward. An alternative might be for some of the various railroad associations to assign a competent man to authorship of a desirable text in the field or fields of their interest, paying him a salary while so occupied.

An alert operating officer of a large railroad, when your reporter discussed this situation with him, was not impressed with its importance. "You can't learn railroading out of a book," he said. "The only way you can learn it is by actual experience."

No disagreement here. You can't learn a foreign language by reading a book about it either—but the book helps. For that matter, you don't learn English by reading a book—but by years of actual practice in speaking it and hearing it. You *could* learn English, and learn it well, just by speaking and hearing it, leaving books entirely out of it. But combining the books with the actual practice achieves the result faster, and probably better, than with practice alone.

Undoubtedly it's the same with railroad textbooks. They'd be no substitute for experience, but they'd be a valuable supplement to experience and help it along. But where are the authors?

J. G. L.

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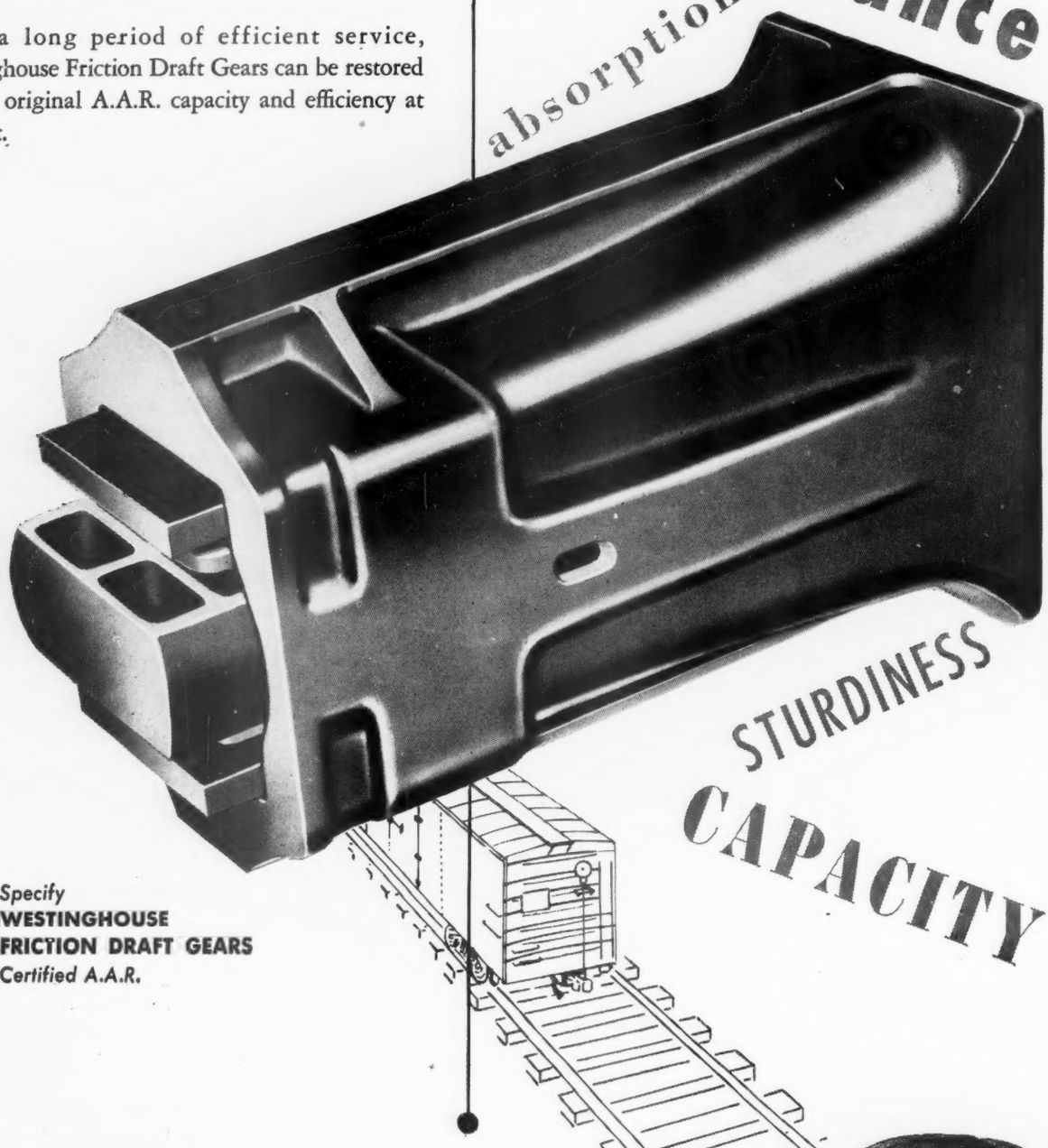

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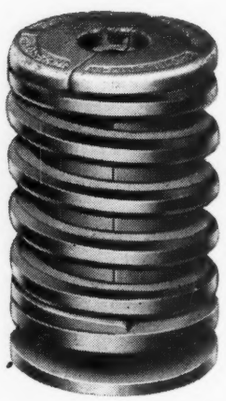

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# PLOWMAN'S PROPHECY

In a short speech at the opening of the Southern Railway's Oliver yard at New Orleans a few weeks ago, E. G. Plowman, traffic vice-president of United States Steel, rose far above the polite iteration of the obvious, which is all that can be fairly expected of a speaker on such an occasion. He went further and gave full play to his optimism and his informed imagination about the future progress of the railroads. His observations could be truly prophetic, with significance far beyond the single event which he was helping to celebrate. Here, in substance, is what he said:

"Not very many years ago, railroads thought of their passenger stations as requiring Queen Anne fronts. Entirely too many railroads treated their yards as the Mary Ann back counterpart of their luxurious passenger stations. That is no longer true. This fine new Oliver yard is just as important in selling and developing traffic as is the passenger station.

"I like to think of this yard, bearing the name of one of the great railroad traffic executives of this nation, as being willing and able to sell and develop freight traffic. For example—the long-sought-for national system of classification of freight cars at origin rather than destination might be born here. If that happened this yard could be proud, indeed, since it would have found out how to reduce time in transit of our nation's freight cars.

"There is another great challenge to the thoughtful operators of this yard. Concealed damage due to end impact is the greatest single handicap of modern American railroading. End impact shocks occur largely in yards and are due to natural difficulties in controlling engine and car speeds. As a child I used to love to ride the dare-devil roller coaster. The cars would drop swiftly and the jerk as they started up the next hill was thrilling. I hung on and took that shock with my arms rather than my neck. But freight can't hang on. It just sits there on the floor of the boxcar or gondola or flat car and absorbs the forward energy of its 3, 6, or 9 miles an hour switching collision with the next car. All too often freight develops concealed damage. It is scratched or dented or squeezed or broken. Its value to the consignee is less or is nothing. Consignor and consignee then become more aware that trucks and barges don't require packaging and bracing of freight as if for a small earthquake.

"Some inventive American may invent a new kind of automatic coupler that will absorb and dissipate the forward energy of switching motion without the present concealed damage to cargo. Maybe the real answer is there. Let cars be switched into each other at 20 miles an hour instead of at creeping speeds and let a new type of coupler and draft gear take up the shock. There is a challenge in this end impact problem, however it is to be solved.

"Reflect for a moment on the traffic this yard will see and handle during the next half century. There will be many new raw materials and new products, some with new names and new uses. America is dynamic. It is expanding. This yard will surely play its own important role in handling new materials and products as well as those already well known and of long established usefulness.

"It has long been my belief that freight car design is in the midst of great change and substantial improvement. Since Elmer Oliver became vice-president of this system, in 1924, he has seen four new kinds of freight cars win some degree of acceptance. The flat car or gondola has been equipped with compartments, or steel boxes, each carrying a measured quantity of material. Long gondolas with 65 ft. 6 in. of clear inside length have become numerous and popular. The coal hopper has acquired a cover. This new covered hopper carries cement, flour, soy beans and many other commodities. The box car has, to the number of many thousand examples, become a device car. Its interior is fitted with semipermanent brackets and fixtures for loading many products, ranging from automobiles to package freight.

"The creative thinking that developed the compartment car, the long gondola, the covered hopper and the device-equipped box car has not become weary of resistance to change. It is a force to be reckoned with. An example is the covered gondola, which is being studied and worked on by many persons and concerns.

"In a way it is the modern freight classification yard that makes the specialized freight car possible and economic. With efficient yard handling, the one-way freight car can offset its lack of return loads by handling more loads per month. Here is another challenging opportunity for this fine new yard. Its operators can help make the specialized freight car a profitable car. Who knows where this will lead? Perhaps some brilliant yard employee of the future will show the nation's railroads how to design and build some new and valuable type of freight car.

"Yards are for traffic. There are some advocates of the opposite idea—that freight traffic exists in order to use railroad yards. This is a socialistic fallacy. Acting on this assumption, at least one foreign nation has prohibited a truck from carrying a load beyond the nearest railroad station. This foreign country's state-owned railroad thus has a legal monopoly on all but local truck traffic, which local trucking must act as feeder to each nearby railroad station. Under our American plan, on the contrary, each railroad gets and retains only the freight traffic that it deserves.

"This distinction is at the heart of our private enterprise

system. Private enterprise keeps America great. The customer is king. This new yard investment is intended to improve and make more efficient the handling of freight cars in and out of New Orleans. It has been built and will be operated to sell and develop railroad traffic."

No prophecy—except the spurious tea-leaf variety—pretends to foretell the inevitable. The true prophet foresees, instead, what *might* happen if the people who *could* make the prophecy come true are as big in mind as the prophet is. This paper believes that there are a lot of railroad men—yes, and manufacturers for the railways—who regularly read these pages, whose view of the future of the railroad industry is as large and as optimistic as Mr. Plowman's. These people will welcome having on their side so articulate an advocate as he.

If railroad men preferred the lazy path of "security" to the dangerous one of enterprise, they would not be fighting, as they are, to get their regulatory shackles removed, so they may have greater freedom in competition. Instead, they'd be resigned to their chains and be seeking to have the same chains applied to their rivals. If they sought "security" through coercion, they'd be looking for monopoly by political action, instead of spending, as they are, all the money they can lay their hands on to improve their facilities and service.

Ideas dominate actions. Ideas have no really effective existence unless they are expressed in dramatic terms which quicken the imagination and determination, while not affronting commonsense. A lot of railroad men, we suspect, will find that Mr. Plowman's words express thoughts they've been entertaining for some time, but maybe not so concretely. Anyhow, that's how they hit us.

Let's get on, then, with restoring private enterprise to transportation—untrammeled, and unmitigated and unqualified! Let's leave to those naive interests who've not yet suffered at government's hands as the railroads have their enormous publicity campaigns for increased government hand-outs. While they are whooping it up for *more* government intermingling in their business, surely it's the American way the railroads are following by demanding *less.*

---

## THE OTHER SIDE OF THE TRACKS

"We expect to be a regulated industry. But we think that regulation should be only that which is sufficient to protect the public interest and no more. We are firmly convinced that the philosophy of government regulation which has dominated our industry is working against the national interest—which is also your interest. If we can prove that to you, we would like your help and the help of all who believe in free enterprise. . . .

"Ours is a competitive industry . . . The times have changed, but the rules haven't. The ghost of a long-departed past lives on in the monopoly-type regulation still imposed on the railroads. . . .

"Today your railroads cannot adjust prices promptly—up or down—to meet increased operating costs or to meet competition. They are stymied by local and state politics in seeking the right to abandon services for which there is no public demand or necessity. They cannot compete equally for business with other forms of transportation. And your railroads, butting their heads against competition that is partially subsidized—but still doing a large volume of business—have had earnings insufficient to maintain their credit, improve their properties, and increase their efficiency as much as is necessary and as much as they desire.

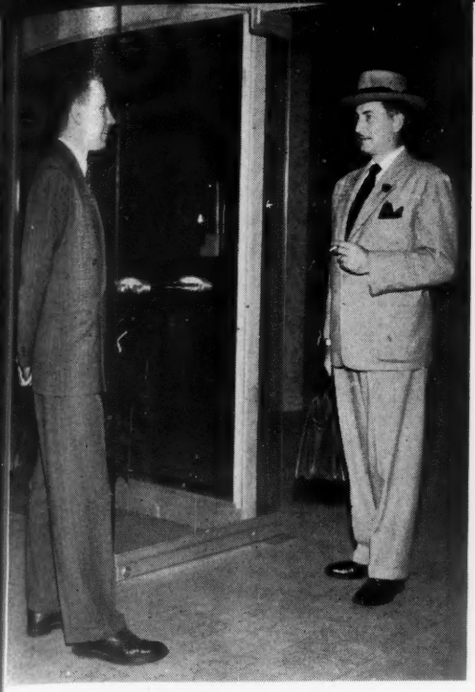
"Our business has been boom-size, while our profits have been depression-size. As a result the investor of equity capital turned his back on us long ago. We have been able to finance our purchases of new locomotives and cars principally through equipment trusts which are chattel mortgages on our rolling stock, and we have dug deep into our working capital to finance those improvements which have made our increases in efficiency very substantial. In fact, only the greatly increased efficiency of the railroads has allowed them to survive as a private business. . . .

"Some of you in your own businesses, and through industry groups of which you are members, have helped to keep us on the wrong side of the tracks. We have a lot in common—your industries and mine. But when we take a look at the record, we begin to wonder. Many times in the past when we should have been working together cooperatively for our common good, we were actually working at cross-purposes. . . .

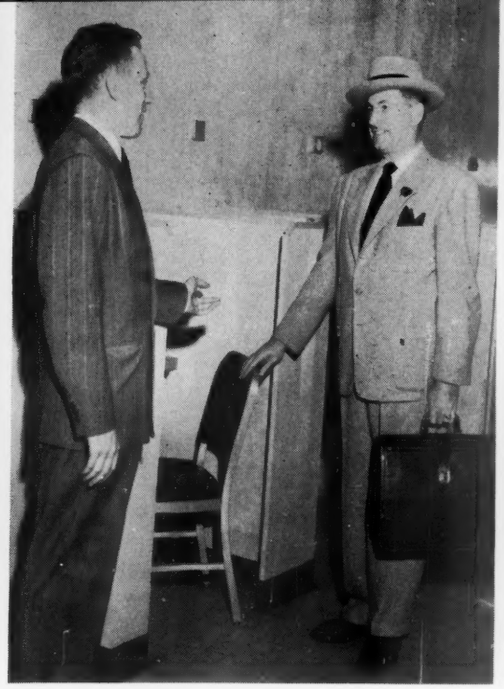
"How, I ask you, can we get away from the wrong side of the tracks if representatives of business and industry continue to drive us back with thoughtlessly aimed brickbats? We expect to hear advocacy of creeping socialism from some people, but we don't expect to hear it advocated by your representatives and by associations representing you. But that is what we have had to contend with and that is one of the reasons why I welcome the opportunity of talking to you.

"Sometime ago the eastern railroads collectively came to the conclusion that the railroad situation existing with respect to outmoded regulation and depressed earnings needed some vigorous treatment, in order to get American businessmen—in what we think is their own self-interest—to take heed of a situation that bodes evil for the country. We are not seeking to deregulate the railroad industry . . . We accept the theory of regulation, but not beyond the extent that it is necessary to serve the public interest, and without trespass upon managerial responsibility. We are not trying to drive any of our competitors out of business, nor inflict upon them any additional regulation . . . What we seek is that regulation be modernized to meet present-day conditions, and to provide for all forms of transportation an opportunity to compete in the transportation markets of the country on a basis of equal opportunity, with favor to none, but fairness to all. . . .

"We ask you to join us in getting out of the ivory towers; to take a look at the things that are going on that don't directly affect you today, but might seriously affect you tommorrow; to keep an eye on the fellow who is on the wrong side of the tracks and help him get over on the right side."—*From an address by William White, president, New York Central System, at the 57th annual Congress of American Industry, sponsored by the National Association of Manufacturers.*



**1** PROSPECTIVE passenger is greeted at entrance lobby of the new SP travel service agency by a floorman who. . .



**2** ESCORTS him to one of the ten telephone sales booths. These are a key installation in the new sales setup.

**3** LIFTING the telephone receiver automatically connects the passenger with a "travel specialist" elsewhere in the same building.

# A New Approach to Volume Ticket Sales

***Southern Pacific's telephone office system boosts capacity, eliminates long customer "lineups"***

The Southern Pacific recently closed the doors of its city ticket office in Los Angeles. At the same time it opened a new "Telephone Sales Travel Office" on the street floor of its general office building at 610 South Main st., just two blocks distant. "In replacing our conventional city agency," said Claude E. Peterson, vice-president in charge of traffic, "we hope to provide a more attractive passenger sales service which will not be swamped during peak periods and which will also operate at lower cost."

Basically, the new travel office operates as an integrated part of the road's regular reservation and telephone sales office on the fourth floor of the same building.

The key to the integration is a series of 10 "sit down" public phone booths in the main floor office. Each phone automatically connects the prospective passenger with one of the telephone sales clerks in the upstairs office. In short, sales from the new agency are handled through the same channels as are the telephone inquiries which the upstairs office normally handles from most of southern California.

### *Advantages of New System*

According to George B. Hanson, passenger traffic manager of the SP's Southern district, preliminary experience with the new office has indicated that:

(1) *"Lineups" can be eliminated.* Every customer is now "first" by reason of the fact that there is always a phone booth available where his needs may be heard without delay. There are no long lineups at ticket windows either, because they are used only to deliver prepared transportation.

(2) *Service can be faster.* Patrons securing long drawn out travel information or waiting for makeup of complicated tickets no longer create bottlenecks because additional phone booths may be opened up as needed. Sufficient help may always be obtained within the fourth floor office to handle incoming calls even at peak periods.

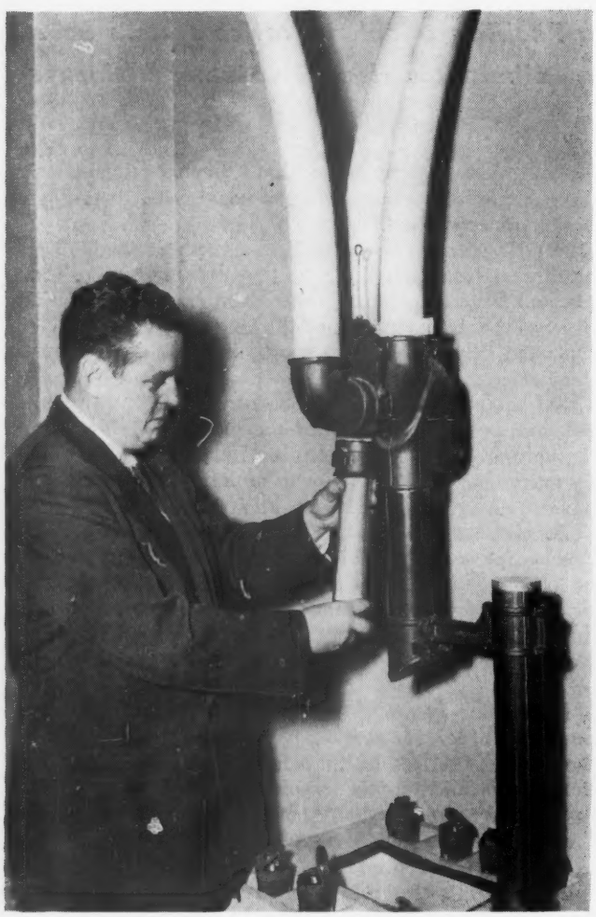
(3) *Volume capacity can be increased.* Sales personnel may be placed in any of the units of the system as the volume of business requires. Unanticipated peaks of as much as 50 per cent over anticipated sales volume have been handled and met without delay to patrons.

Mr. Hanson reports that the system also tends to encourage passengers placing orders by phone from home or office. This helps eliminate the repetitious task of first answering a passenger's phone inquiry and later duplicating that research to make up tickets and reservations when the passenger calls in person at the ticket office.

During the first week of operation, the average transportation order consumed seven minutes from the time the customer retired to the office lounge section until the ticket was tubed to the cashier's desk. Two additional minutes were required to complete the average sale. As the organization hits its stride, Mr. Hanson believes that the average total time will drop to six or seven minutes. While this may seem a bit long, it reflects the fact that a high portion of Los Angeles passenger sales are comprised of complex transcontinental tickets.

**4** DEVELOPING travel plans, the specialist makes up orders which he turns over to the . . .

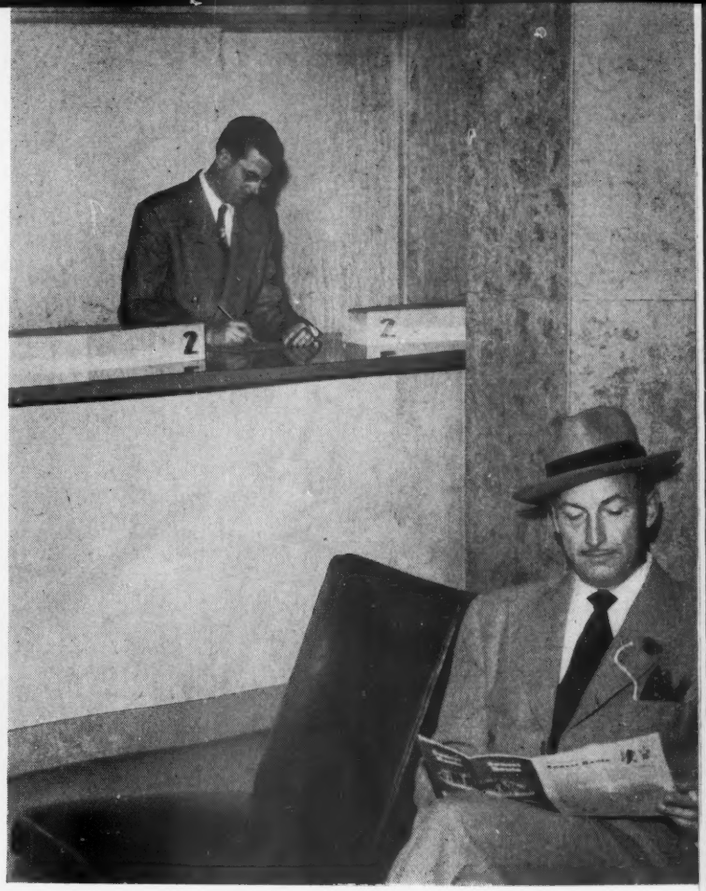
**5** TICKET makeup section; tickets are executed . . .



**7** COMPLETED tickets are sent via this pneumatic tube system to the main-floor office where . . .

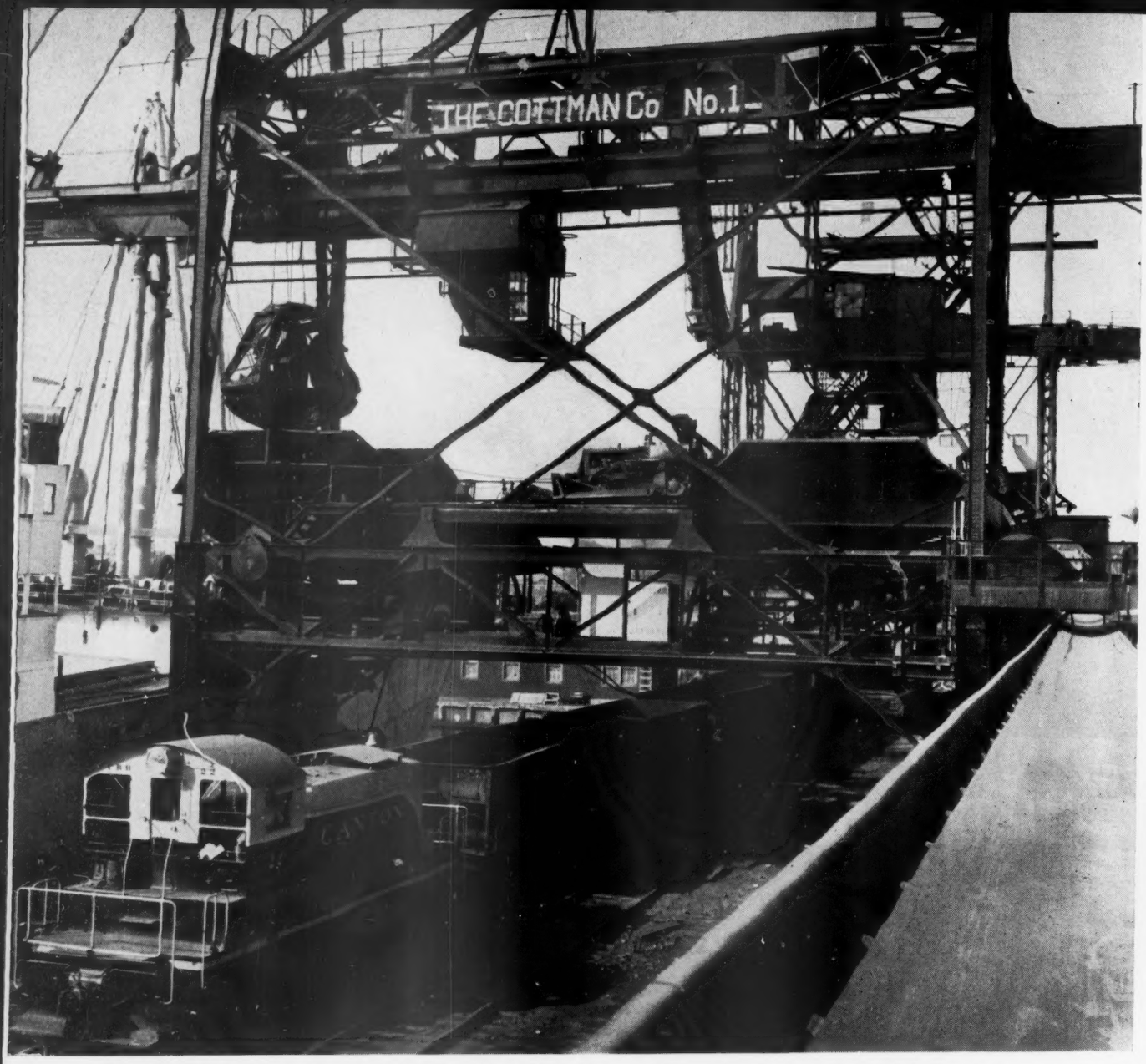
**8** THE CASHIER announces on the public address system that Mr. Customer's tickets are now ready.

. . . by this staff on a continual production basis.



**6** **MEANWHILE,** the passenger may choose either to wait for his tickets in the lounge or put in "will call."

**9** **SALE** is then completed over the counter. Elapsed time: Nine minutes or less, during most of which the customer has been seated.




**Ore lifted from the hold of the ship by the bucket of crane No. 1 can be deposited into one of two receiving hoppers located on the crane's lower deck, depending on whether the ore is to be loaded directly into cars or delivered to the high-line conveyor. This crane can unload ships at either side of the pier.**

## *Anticipating Increased Imports . . .*

# Canton Railroad Expands Ore Dock

***Ship-to-shore unloading capacity of plant at Baltimore doubled by widening pier and installing conveyors***

**By W. H. RAFF**
Contract Engineer
Robins Engineering Division, Hewitt-Robins, I c.

The ore-unloading facilities of the Canton Railroad in Baltimore have been expanded and modernized to speed up the transfer of incoming ore from ships to railroad cars. Recently put into operation, the new facilities have a maximum rated capacity of 3,000 tons an hour, almost double that of the former plant. The modernized dock is equipped with a giant conveyor system which can deliver ore from ship to shore at the rate of 50 cars (60 tons to a car) an hour. Also, the actual weighing capacity at the track bin can be increased beyond this rate in emergencies.

The expansion program was undertaken in anticipa-

tion of increased imports of iron, manganese, chrome and other ores coming in from new developments in Labrador, Venezuela, Brazil and Liberia, and at the same time to handle larger imports from older producing sources in Sweden, Norway, Portugal, Spain, Yugoslavia, Turkey, Cuba, Africa and the Far East. Ore imports are increasing because of the depletion of reserves in the United States.

Several years ago, Daniel A. Lindley, president of the Canton, together with the board of directors, decided to expand their facilities. To determine the best means of accomplishing this and to design and build the necessary improvements, they engaged Robins Engineers, a division of Hewitt-Robins, Inc.

### *Existing Facilities*

The Canton ore pier juts southward from the north bank of the Patapsco river which forms part of the port of Baltimore. It is a finger-type pier, 90 ft. wide, and extends 1,253 ft. into the river. The west side of the ore dock has been dredged to a depth of 35 ft. and provides deep-water exposure sufficient to berth comfortably two large ore carriers. On the east side some 800 ft. of deep water is used mostly by barges, but ore carriers can also be unloaded there.

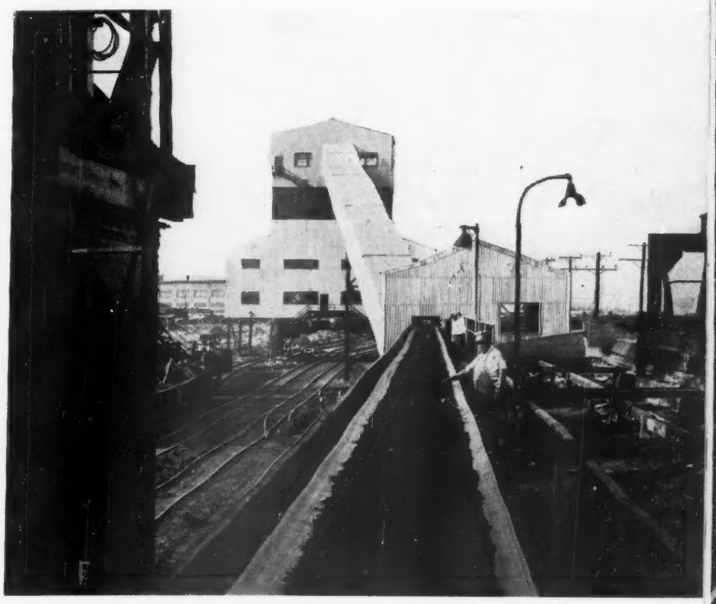
Four standard-gage railroad tracks, each with a capacity of 35 hopper cars, run the entire length of the dock and connect with the Canton terminal where ore trains are delivered to interchanges of the Pennsylvania, the Baltimore & Ohio and the Western Maryland. These tracks are numbered 1, 2, 3 and 4, beginning on the west side of the dock.

Before modernization, two cranes on the pier scooped up the ore from the holds of the ships and discharged it into receiving hoppers which dumped directly into railroad cars. Unloading tower No. 1, or crane No. 1 as the operators prefer to call it, is south of crane No. 2. Its old receiving hopper is on the west or ship side. It is equipped with a weigh larry which previously discharged the weighed ore to cars on any one of the four tracks. Crane No. 2 has its old receiving hopper on the east side and a weigh-basket scale under the receiving hopper which discharges weighed ore to cars on track No. 4 only.

To increase the unloading capacity of the dock, it was decided to install a new third crane on the offshore end, south of cranes No. 1 and No. 2. But this was by no means the entire solution to the problem. Even with the two present cranes operating, delay was experienced because of the lack of sufficient tail room for the ore trains. This was particularly noticeable when unloading a ship berthed at the south end. It therefore became obvious that with a third crane in operation, new weighing and car-loading facilities must be provided and that alterations must be made to the two present cranes so that ore from each of them might be conveyed to the new weigh station.

To accomplish this, the dock was widened along its 800-ft. east face and a new 48-in. high-line conveyor was installed along the entire east side. A second belt was installed to carry the ore from the main belt up a 16-deg. incline to a new weigh station, 100 ft. high, erected on the shore so as to provide about 1,600 ft. of tail room. Atop the weigh station is a large balancing hopper which receives the ore and feeds it into four smaller weigh hoppers, each located over one of the railroad tracks. The weigh hoppers, scales and weight recorders are electrically interlocked in a fixed cycle to regulate the flow of ore into the cars. For the time being, the main belt will be fed by the two altered ship-unloading cranes until the third crane is put into operation in the second quarter of 1953.

**The "high-line" conveyor belt was especially selected for this severe service. It consists of seven plies of 42-oz. long-staple cotton duck with two bottom plies nylon filled. The belt was vulcanized to make it endless.**



**The high-line conveyor is 1,336 ft. long, as it carries ore toward the junction house. This view was taken before the four tracks had been lined over to pass under the new weigh station (background).**

The problems involved in altering the two cranes so that they might discharge to the new high-line conveyor were many and complex. Numerous preliminary studies were made on each before the final schemes were adopted.

A new hopper was installed on the east side of crane No. 1 (Fig. 2) and two 42-in. wide manganese-steel feeder conveyors with a common drive were provided to transfer the ore from this hopper to the new high-line belt.

Since there would be considerable wear and tear on the expensive belt of the high-speed high line if the two feeders, side by side, were to discharge directly at right angles onto it, a short rugged transfer conveyor was mounted on the crane, directly over and in line with the high-line conveyor. The transfer conveyor not only takes the pounding of the heavy ore but also eases it gently onto the high-line belt in the direction of its travel and

**At the junction house, this conveyor, 275 ft. long, receives the ore from the high-line belt and carries it up a 16-deg. incline to a surge bin on top of the weigh station building. The speed of this belt is 615 ft. per min. as compared with 545 ft. per min. for the high-line conveyor.**

close to its speed. This short belt, having little tension, is of less expensive construction and can be easily replaced.

To provide room for this new equipment, it was necessary to shorten the old weigh larry travel so that it will now service tracks No. 1 and No. 2 only instead of all four of the ore dock tracks as formerly.

### *More Extensive Crane Alterations*

The alterations to crane No. 2 were of a more formidable nature. On this crane (Fig. 3) a new receiving hopper was installed on the west or ship side about 11 ft. lower than the old hopper on the east side so as not to interfere with the arc of the bucket travel. The main deck under this new hopper was depressed to accommodate two 42-in. wide manganese-steel feeders with a common drive, similar to those installed on crane No. 1.

These feeders carry the ore southward over the main girder of the crane and deliver it to a new 48-in. transverse conveyor (No. 2A). This conveyor is inclined, runs east along the south face of the crane and delivers in turn to a new reversible conveyor (No. 2B). When running eastward, this latter conveyor feeds the high-line belt and, when running westward, services track No. 3. A weightometer was installed on conveyor No. 2A so that any material going to track No. 3 can be weighed. It will be noted that crane No. 2, which originally fed track No. 4 only, now can service tracks No. 3 and No. 4, whereas crane No. 1 will deliver to tracks No. 1 and No. 2.

Conveyors No. 2A and 2B, the weightometer, and the drives and access platforms, are all supported on a cantilevered structure along the south face of crane No. 2. Analysis had revealed that the existing cranes, as well as their trucks and traverse drives, were capable of sustaining the new loads.

When crane No. 3 is installed, its hopper will be on the west side. Through a weigh larry it will deliver to ore cars standing on tracks No. 2, No. 3 and No. 4. A 60-in. wide manganese-steel feeder will feed a 36-in. conveyor which in turn will discharge to the high-line belt. This feeder will be mounted on a carriage so as to allow the larry to receive its load from the hopper when the feeder is not being used.

The two existing cranes, under ideal conditions of free digging and heavy ore, have each handled better than 900 long tons an hour. It is expected that, when the bottleneck on the dock is eliminated with its attendant delays in providing cars, the capacity of both cranes will be increased. As a safety factor, all new conveying equipment on each crane is designed to handle 1,200 long tons an hour. It is not practical to expect all three cranes to be operating simultaneously at maximum capacity. The high-line and slope conveyors are therefore designed to handle 3,000 long tons an hour.

The 48-in. high-line conveyor is 1,336 ft. long. It begins at the extreme south end of the dock and runs to a junction house just beyond the north end of the crane tracks. The belting is of the finest quality, especially selected for this service, and travels at a speed of 545 ft. per min. The 48-in. slope conveyor travels at a speed of 615 ft. per min. and carries ore received from the high-line belt up to the surge bin of the weigh station.

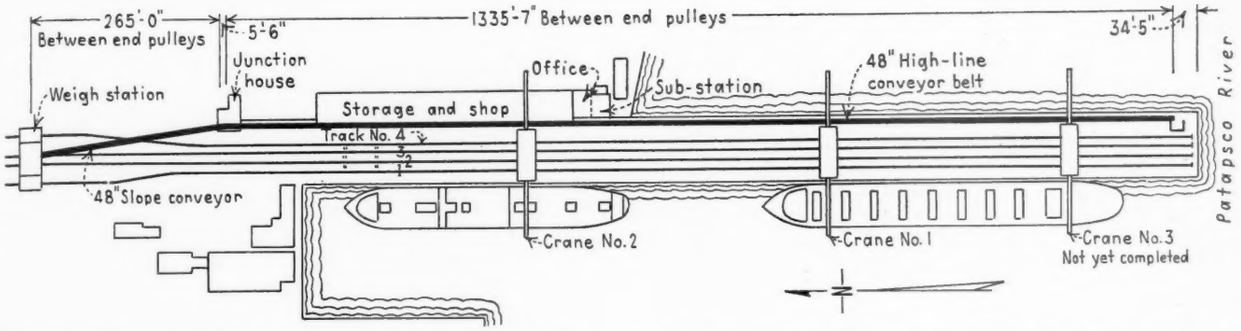
### *Weigh Station Serves Four Tracks*

In many respects the weigh station is the heart of the plant. In general, it consists of a bifurcated surge bin, each leg of which discharges to two feeders. These feeders service four weigh hoppers mounted one over each track, and are 72 in. wide with a capacity of 2,500 long tons an hour.

The capacity of the surge bin varies from 600 long tons to 1,800 long tons, depending on the weight of the ore and its angle of repose. With 150-lb. ore, it will hold about 1,000 long tons, sufficient for 24 minutes' supply with all three cranes operating at maximum speed. Electrically operated swinging gates permit diverting all of the ore to either side of the bin. This arrangement of gates and feeders permits unusual flexibility in loading cars as all four tracks can be loaded simultaneously or any combination of tracks can be loaded.

Another unusual feature is the inclusion of two cleaning scaffolds. Each of these is suspended in the bight of a steel cable in such a way that when idle it will clear the pile, but when used for cleaning, it can be both lowered and moved sidewise to give access to all of the interior surfaces of the bin. Because one ship may carry ore of a sticky nature which will hang up on the bin walls, while the next ship may have an entirely different ore destined to another consignee, it will be seen that bin-cleaning facilities are of importance.

The weigh baskets and scales are of exceptional interest. In a privately owned ore dock such as this one, ore cars of many types and capacities are encountered. They will vary from 50-ton cars with a load limit of 120,000 to 128,000 lb. to 90-ton cars with a load limit of about 210,000 lb. They may be bottom-dump, side-dump or gondola cars. Investigation at other ore docks disclosed that the average load per car over a year ran about 65 long tons, or 146,000 lb. Allowing a slight margin of safety, we assumed an average car load of 140,000 lb. It was thought desirable to have the load-




**The ore dock was widened on its east side to support the high-line conveyor. Another belt conveyor takes the ore from the main belt at the junction house and carries it up an incline to the weigh station.**

ing capacity at each track equivalent to that of any one crane. By means of the bin-diverting gate, either the east or west pair of tracks could be used for one crane with one track loading, while the loaded and empty ore trains are being switched on the other track. With all three cranes operating and the conveyor system carrying 3,000 long tons an hour, three tracks are to be loading while the fourth is being switched. Here again, a margin of safety was provided by establishing the loading rate at 1,200 long tons per hour.

With these two factors established, it was possible to develop the cycle at the weigh hoppers. On the basis of loading out 1,200 long tons an hour into cars at 140,000 lb. per car, it was determined that there will be 38.4 dumps an hour which, if roughed out at 40 dumps an hour, results in one dump in 90 seconds.

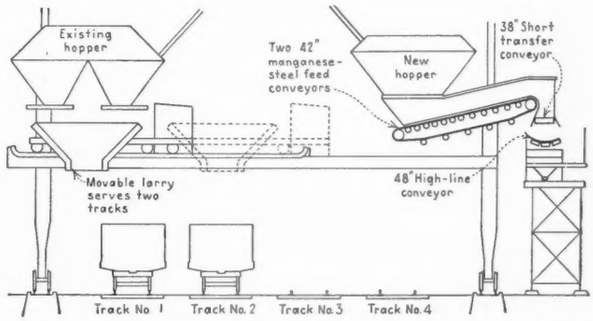
For this the scale cycle was arranged as follows:

| | | |
|---|---|---|
| Start feeder | 2 | sec. |
| Run feeder | 50 | " |
| Stop feeder plus time delay | 10 | " |
| Weigh loaded hopper incl. printing | 5 | " |
| Open gate | 5 | " |
| Empty hopper | 8 | " |
| Close gate | 5 | " |
| Weigh empty hopper incl. printing | 5 | " |
| Total cycle | 90 | sec. |

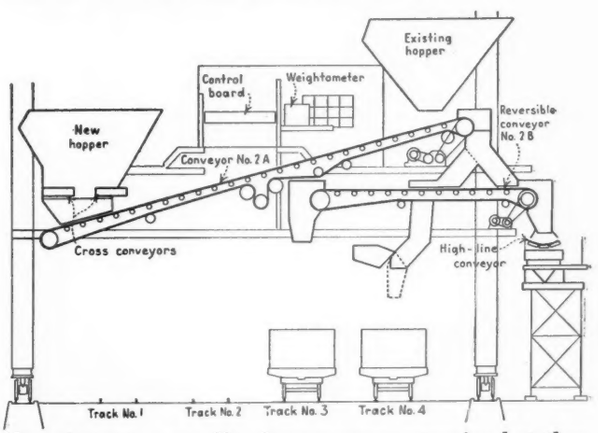
All of these operations are controlled from one panel by each weighmaster in his room. Special consideration was given to the two weighmaster rooms to make them attractive and comfortable. Their situation is strategic as they are hung under the weigh-hopper floor so as to give clear unimpeded views of the ore being dumped.

Normal operating practice is for the train conductor first to hand the weighmaster a set of cards which show the sequence of the car numbers and their load limits as they occur in the empty ore train. When the first car is spotted, the weighmaster sets his scale for the weight of the dump, which normally will be a little less than one-half of the car's load limit.

The weighmaster then starts the feeder. As the hopper fills, the scale pointer revolves and, when it reaches the predetermined setting, the feeder stops automatically. There is then a few seconds time delay to allow any loose material to drop off the feeder, after which the operator enters his card into the printweigh and records the weight of the load. By pushing the start button of the motor-operated gate, he opens the gate and dumps his load. When the hopper is empty, he closes the gate and stamps a second reading on the card, recording the weight of any material hanging up in the hopper. The cycle is then repeated. During the 50-second interval for filling the hopper, the cars are shifted to receive the next load. Railroad signal lights provide communication between the weighmaster or conductor and the engineman of the ore train.



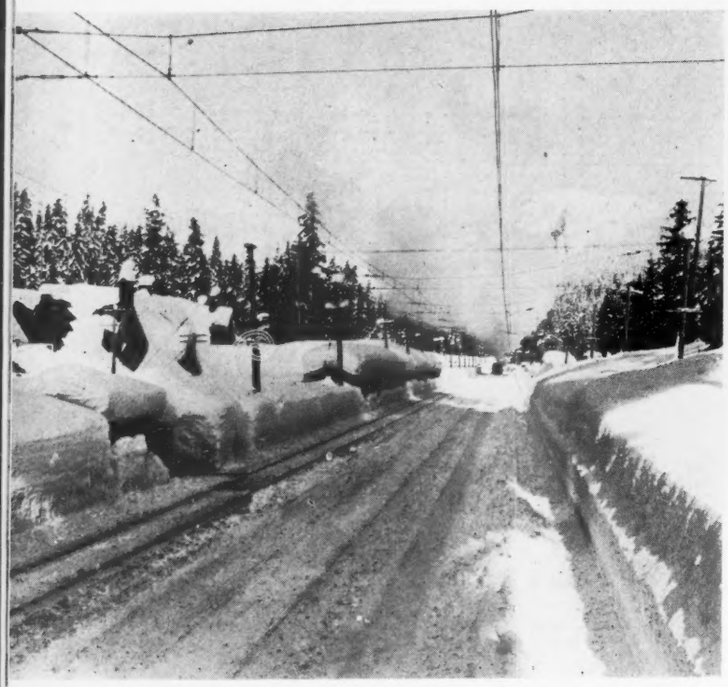

**To prevent excessive wear and tear on the expensive high-line belt, which would occur if the ore were dropped from the two manganese-steel feeders of crane No. 1, a rugged short collecting conveyor was mounted directly over the high-line conveyor. The travel of the old weigh larry was shortened so that it will serve tracks No. 1 and No. 2 only instead of all four tracks as formerly.**




**Alterations to crane No. 2 were more extensive but they enable this crane now to serve the high-line conveyor and cars on both tracks No. 3 and No. 4, whereas, formerly, it could serve cars on track No. 4 only.**

The predetermined settings will vary with the load limits of the ore cars. By means of an ingenious device, the weighmaster will set his scale for these cut-offs without opening the dial head. Seven photoelectric cells are mounted in the back of the head which, when intercepted by an opaque pointer, will open the feeder circuit. These cells are actuated by a selector switch on the operator's panel board.

In addition to the conveyor system and the additional crane to be built later, the Canton is building a new 500-car supporting yard for the ore pier. This project involves five miles of new track.



After the storm.

Easy wheeling for a rotary snow plow.

## *How Much Horsepower?*

# Snow Removal in Mountain Districts

***When requirements are compared with past practice, the author concludes that railroads have been using a boy to do a man's job***

**By L. WYLIE**
Electrical Engineer
Chicago, Milwaukee, St. Paul & Pacific

Apparently the design of rotary snow plows and other heavy equipment for removing snow from railroad tracks in mountainous country in the United States (outside of yards and terminals) has not made the best use of engineering or factual considerations; otherwise, the railroads would not find their best equipment able to make a headway of only ½ to 2 miles per hour in extremely heavy snow.

There is need for factual information on design of equipment and amount of horsepower necessary to remove snow from tracks at a rate sufficiently high to keep the tracks clear and open. Obviously efficient snow handling machinery cannot be developed without such information. The following figures are presented with the hope that they will help to make the problem more clear to railroad officers who may be interested in snow removal problems.

The weight of freshly fallen snow is from 2 to 5 lb. per cu. ft., depending on temperature, locality, moisture content, etc. The weight of old snow of considerable depth or of drifted snow is 6 to 30 lb. per cu. ft. The weight of snow in large slides is 30 to 45 lb. per cu. ft.

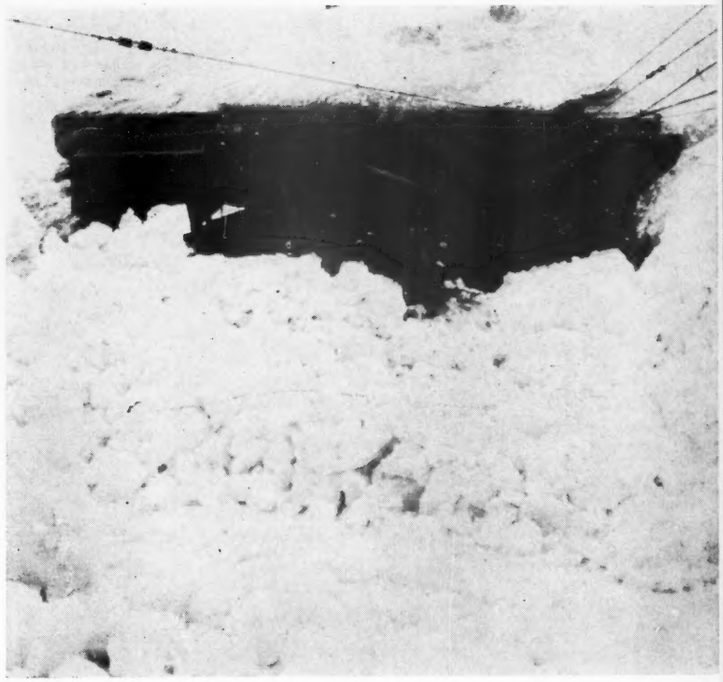
The highest rate of snowfall will be 4 to 12 in. per hour, depending on locality, temperature, and water content of snow. Drifting can occur at almost any rate, depending on the character of the snow, the velocity of the wind, and the nature of obstructions causing reduction in wind velocity.

We can assume that snow must be elevated to a height of 12 ft. above the top of rail and discharged at a velocity of 86.5 ft. per sec. This velocity corresponds to the rim speed of a rotary snow plow wheel 11 ft. in diameter, operating at 150 r.p.m. so that snow will be thrown well into the clear of the track.

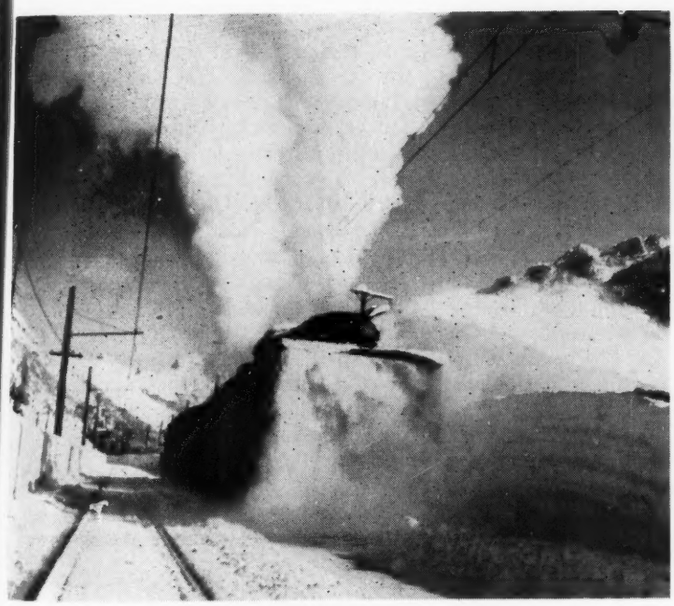
As the discharge opening of a conventional rotary snow plow used by the railroads is usually less than 10 per cent of the face or intake area of the wheel, the velocity of discharge from the plow must be many times more than the speed of the forward movement of the plow, depending on the depth of snow being removed and the horsepower available for driving the rotor of the snow plow.

The calculated weight of snow per mile of track and the corresponding horsepower required by a rotary snow

There is a railroad down under somewhere.



Digging down to a tunnel entrance with a DD-8 bulldozer.



A rotary plow following a cut widener.

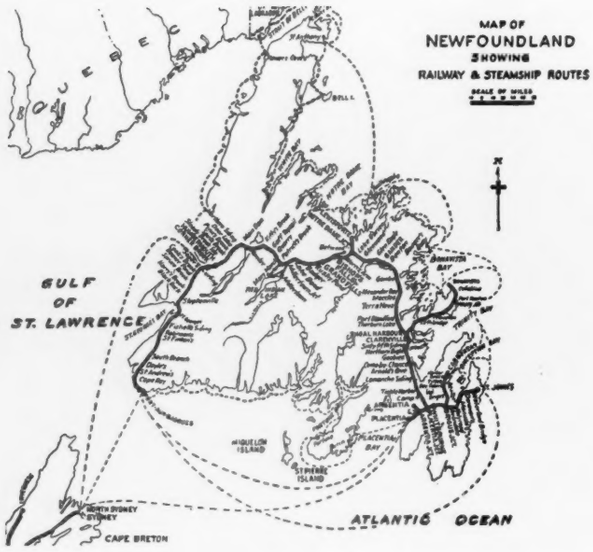
Only a large size caterpillar "dozer" can handle this.

plow to remove the snow at a track speed of 1 m.p.h. and at 10 m.p.h. would be as follows:

| Depth of snow ..... | 2 ft. | 4 ft. | 6 ft. | 8 ft. | 10 ft. |
|---|---|---|---|---|---|
| Width removed ..... | 11 ft. | 11 ft. | 11 ft. | 11 ft. | 11 ft. |
| Weight per cu. ft. (lb.) | 4 | 7 | 9 | 20 | 30 |
| Weight per mile (lb.) | 464,640 | 1,626,240 | 3,136,320 | 9,292,800 | 17,424,000 |
| Weight removed per second at 1 m.p.h. (lb.) | 129 | 524 | 871 | 2,580 | 4,840 |
| Weight removed per second at 10 m.p.h. (lb.) | 1,290 | 5,240 | 8,710 | 25,800 | 48,400 |
| Speed of rotor (m.p.h.) | 150 | 150 | 150 | 150 | 150 |
| Horsepower required at 1 m.p.h. | 30 | 120 | 200 | 600 | 1,129 |
| Horsepower required at 10 m.p.h. | 300 | 1,200 | 2,000 | 6,000 | 11,290 |

The figures shown above for horsepower do not take into consideration any losses due to friction, windage or other losses in machinery.

We believe that the above figures show—even allowing for some unknowns and some errors in assumption—that in the matter of horsepower output of equipment used to remove snow from railroad tracks during periods of heavy snow storms, some railroads have been using a boy to do a man's work. This assumption appears to be borne out by inability to keep tracks clear for the safe movement of trains during periods of heavy snowfall.




## *CNR's Newfoundland Lines*

# Serving Canada's Newest Province

While Newfoundland is looked upon as the oldest British-settled portion of North America, and its railway dates back to 1881, nevertheless the province may be considered, economically, to be "frontier" country and its railway a pioneering enterprise. This is because Newfoundland has only lately come into the orbit of Canada's industrial boom; rapid expansion of its economy is making the same demands upon its railway as that of any frontier territory.

As one of the conditions of joining the confederation of Canada as its tenth and newest province, the former crown colony of Newfoundland stipulated that its government-owned railway should be turned over to the Canadian National for operation, though title should continue to be vested in the government—as is true of all the so-called Canadian Government Railways properties operated by the CNR since 1921. On April 1, 1949, the date of union, the CNR acquired for operation 705 route-miles of railway and 14 ships and added some 4,000 employees to its payroll. The terms of union also stipulated that "for the purpose of railway rate regulation, the Island of Newfoundland will be included in the Maritime region of Canada, and through traffic moving between North Sydney and Port-aux-Basques [the main ferry route between Newfoundland and the CNR mainland lines] will be treated as all-rail traffic."

Carrying out this provision effected a substantial reduction in rates applicable to Newfoundland operations. Simultaneously, CNR standards of rates of pay and working conditions were extended to the Newfoundland properties, now operated as a district of the Atlantic region of the CNR. These two forces worsened the already chronic failure of the Newfoundland properties to make ends meet. Upon assumption in 1949, it was estimated that in operating the Newfoundland the CNR would incur an annual deficit of about $4 million.

The property which the CNR took over comprised 705 route-miles of 3-ft. 6-in.-gage railway. The 547-mile main line crosses the island from St. John's to Port-aux-Basques circuitously like an inverted "U." From the latter terminus there is a passenger and freight steamship service to the CNR mainland rails at North Sydney, N.S. Because the gages are different, railway rolling stock is not ferried between these points. Branches connect the Newfoundland main line with Harbour Grace and Carbonear, with Placentia and Argentia, with Lewisporte and with Bonavista. Rolling stock at time of union comprised 46 steam and three diesel locomotives; 98 passenger-train cars; 1,004 freight cars and 154 units of work equipment. Through the end of 1951 the CNR placed in service in Newfoundland 6 steam locomotives; 60 box, 30 auto box, 50 flat, 10 express-refrigerator, and 3 baggage cars and 8 coaches—all new and specially designed for narrow-gage operation. Vital rehabilitation of the fixed properties was started immediately after assumption of operation and has been pushed vigorously ever since.

### *New Ice-Breaking Ferry*

Added to the fleet of passenger and freight steamers taken over in 1949 will be one of the largest and most modern ocean ferries in the world, now under construction in Montreal for the Canadian federal government, for operation by the CNR. The new ice-breaking ferry will be equipped with flat decks and elevators for handling some automobiles, trucks and trailers, in addition to passengers and cargo. Railway freight is to be transshipped in 6-ton containers, handled to and from the ship elevators by large fork-lift trucks. On board ship the containers will fit into prepared locations, secured from shifting while the vessel is at sea. For consignees and shippers equipped to handle them, the containers will be used through from rail origin to rail destination. Otherwise their contents will be loaded and unloaded for rail movement at each end of the water journey.

A new dock and terminal at Port-aux-Basques and a new dock at North Sydney are also being constructed to make for faster transshipment. Combined cost of the ship and enlarged terminals are expected to come to $8 to $9 million.

The former Newfoundland railway entered into the economic life of the country in unusual ways. It owned, for example, a drydock at St. John's—not only for its own steamer fleet, but for commercial repair jobs. It operated local and long distance telephone service on the island, as well as telegraphs and cables. Its telegraphers in the more remote spots also acted as postmasters. These ancillary services were taken over intact by the CNR, but some of them, like the postal functions, are expected to be transferred as soon as possible.

### *Troubled Past of Pioneer*

The Newfoundland lines have had a troubled, prosperity-less past as virtually the sole transportation agency of Newfoundland outside of irregularly operated small freight boats.

A private U.S. company broke ground for the first railway in 1881, but failed after completing 60 miles of line. The English bondholders took over and

**Plants like the Bowater pulp and paper mill at Corner Brook . . .**

**. . . absorb whole train loads of pulpwood on the narrow-gage Newfoundland lines.**

completed a few more miles. Then Sir Robert G. Reid received a government contract to complete and operate the railway as originally planned; by 1897 the line had been completed from St. John's, the island's chief city, to Port-aux-Basques, its main link with the mainland, on the present location. The contract operator, Reid-Newfoundland Company, ran into serious difficulties in World War I, and in 1920 a government commission took over policy-making, with the old company still in charge of operations. In July 1923 the entire undertaking was taken over by the government, under a board of railway commissioners, and so remained through various forms of government status, until the act of union in 1949.

However old, Newfoundland is frontier country for railroaders. Its population of 300,000 lives in some 1,000 villages scattered over 44,000 sq. miles of territory (about the same as Pennsylvania). Highways are few and bad. Many villages are reached only by ship. Snow conditions are difficult and expensive. Until recent years the island has not produced enough rail traffic to support the plant necessary to provide even subsistence service.

In 1909 the Grand Falls Paper company began mill construction in Newfoundland. This was the start of interior development on an important scale. Today the mills of this company, the Buchans Mining Company and the Bowater mills at Corner Brook are the three largest industries in the province and the foundation of its economy. They could not operate without the railway.

### *Military and Industrial Traffic*

During World War II, the importance of Newfoundland as a defense and air base for the American and Canadian forces brought traffic to the railway and money to the colony. Traffic on the line increased by some 300 per cent; earnings skyrocketed from about $3.5 million in 1939 to $11 million in 1946. From U.S. lend-lease came some $2 million for equipment and improvements for the railway, loan repayments of which have been made on schedule.

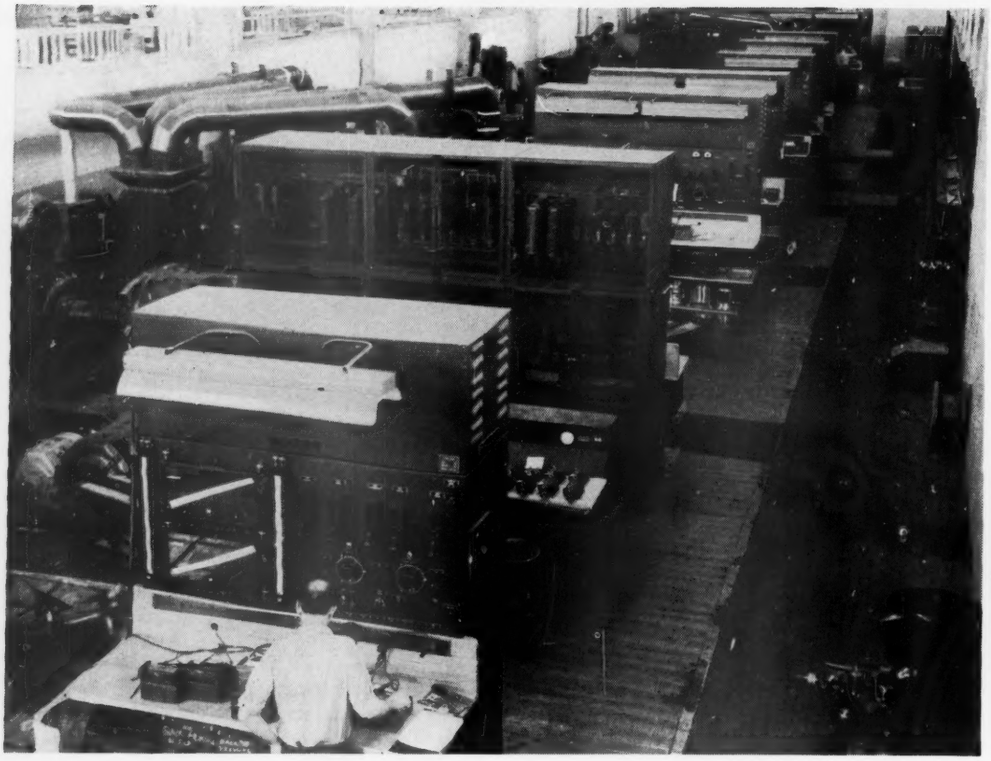
Newfoundland has a most development-conscious government. It not only works hard to attract capital, but goes ahead and builds facilities out of public funds and rents them out to likely prospects. It also loans money on favorable terms to businessmen coming from all parts of the world. This government administers Labrador, on the mainland. On the island of Newfoundland in 1951 there went into production a new birch veneer and plywood plant near St. John's, which absorbs whole trainloads of logs. Two new plants went up alongside the great Bowater pulp and paper mill at Corner Brook, on the West coast. One is a cement plant producing 100,000 tons a year. The other is a gypsum plant, turning out 200 tons of plaster and some 25,000 sq. ft. of wallboard and plaster lath per day. Pending their sale, both plants will be operated as "crown companies."

In the latter part of 1951, three more major industries got their start. This year there will go into production, under a former Czech, a new leather tannery at Carbonear, on Conception Bay. It will use local and imported hides, sheepskins, sealskins and fishskins. A new $5 million machinery plant has been erected by Canadian Machinery & Industry Construction, Ltd., at Octagon Pond, 9 miles from St. John's. United Cotton Mills, Ltd., is putting up a new plant at St. John's for making shirts, dresses and other finished goods from raw cotton which it will import and spin, weave, print and dye.

A dozen other projects are in process. They include an oil-hardening plant to process the island's seal, whale and herring oils, at Harbour Grace; a steel mill on Conception Bay to combine Bell Island (Nfld.) iron ore with Sydney (N.S.) coal; a fine leather goods industry at St. John's; a boot and shoe plant, a chemical industry; an optical industry; a glove plant; a chipboard mill; a fur dressing and dyeing industry and an aluminum products factory.

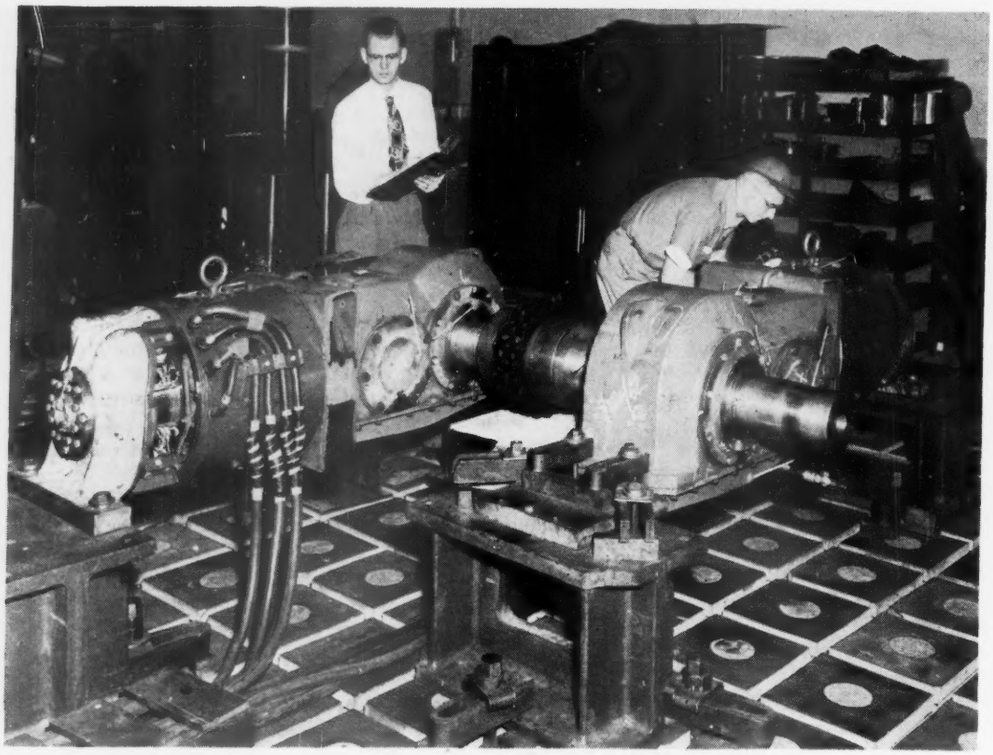
In the mining field, government and private reconnaisance is turning up, among other things, asbestos near Port-aux-Basques; copper-zinc in the Wild Cove-Twillingate area; copper in the Gull Lake, Tilt Cove and Rambler areas; and copper pyrites on Pilley's island. At York Harbour an old base metals mine is being drained and drilling begun in drifts of the old workings.

While certain of these mining developments will use water transportation for outbound movements, rail transport is essential for moving in supplies for most of them, and for handling the production of others.



A general view of the new test facility which is equipped to test traction motors and generators for locomotives beyond the size of any now being built. The 11 test tables shown are built to permit an interchange of operating personnel with a minimum of special instruction.

# This New Plant...



Two test engineers conduct a load test on two double-reduction geared motors.

# ...Will Test Traction Motors

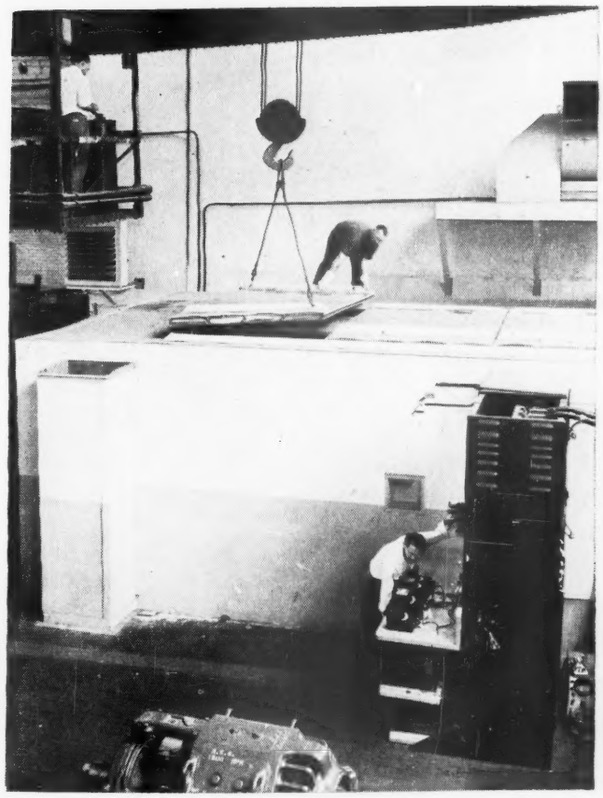
***By accurate explorations of air flow, sound, effect of weather, life, commutation and speed-torque characteristics, it is expected that improved equipment for locomotives will be developed***

A new test facility for motor engineering development has been put in service by the Locomotive and Car Equipment Department of the General Electric Company in Erie, Pa. This installation, covering 20,000 sq. ft., is equipped to test traction motors and generators for locomotives beyond the size of any now being built.

Although these facilities have existed to some degree in various parts of the works, they have now been expanded and consolidated under one roof. The new facilities comprise 11 test tables, a soundproof room for noise-making tests, an air chamber for motor ventilation tests and life-test facilities for simulating service conditions. Power is supplied from a substation covering 4,500 sq. ft. which is totally enclosed and isolated from the general testing area.

The 11 test tables were built with identical configuration of switches and controls to permit an interchange of operating personnel with a minimum of special instruction. Although each table has been designed to handle a particular type of equipment, enough flexibility was allowed so that each can be used to test other types as well. Safety features, such as dead-front switches, contactor compartment interlocks and glass-enclosed high voltage meters are incorporated.

The sound testing room, in which the sound level has been reduced to the point where it will not affect the test results, is used to investigate noise characteristics and compare various designs of equipment. To reduce the ambient sound level from 90 to 60 decibels, the room has walls insulated with rock wool. It floats on a two-foot bed of sand to isolate it from the building foundation. The roof is removable to permit use of an overhead crane.



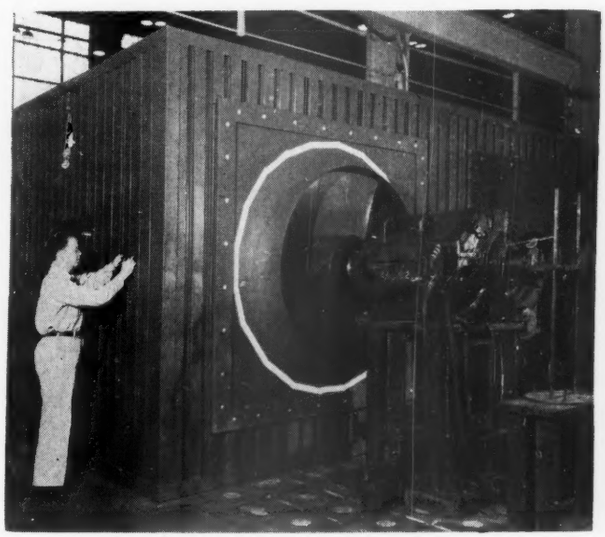
**The sound room is fitted with removable roof sections to facilitate placing and removing equipment to be tested. The room has walls insulated with rock wool and floats on a two-foot bed of sand to isolate it from the building foundation.**

### *Plenum Air Chamber*

A large plenum air chamber, partitioned into two ten-foot cubicles by a steel wall containing nine standard calibrated nozzles, is used to study air flow requirements for ventilating traction motors and generators and for studying the effectiveness of different fan and blower designs. The nine nozzles, made of spun aluminum, range in size from 2 to 16 in. in diameter. By opening and closing various combinations of nozzles, air flow can be accurately measured up to 30,000 cu. ft. per min.

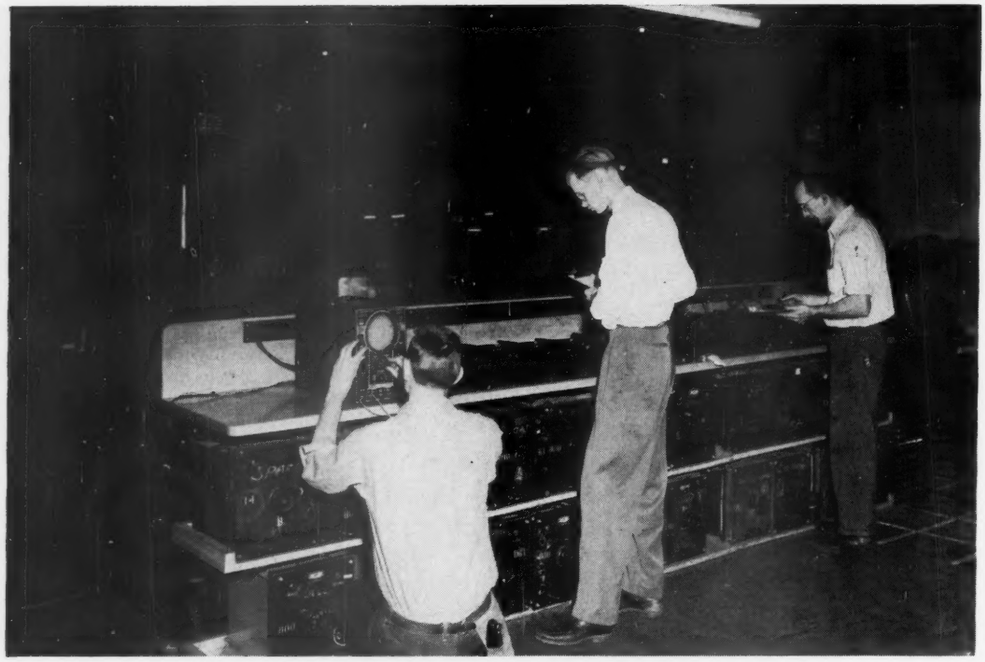
To create various conditions of intake and exhaust, large openings are provided in the front wall of each cubicle for installation of fans and test motors. The difference in static pressure between the two chambers is measured by averaging pressures from 18 different locations in each chamber. All instruments for both air flow and electrical measurements are located centrally at the test table.

The life-test facilities permit simulating actual road conditions for a wide range of equipment over varied cycles of operation. Life tests are speeded up by the use of automatic control which also permits study of fatigue and aging under operating conditions. Safety interlocks and temperature-sensitive relays protect unattended test motors. To investigate the effect of normal weather changes, motors can be tested on an outside platform.

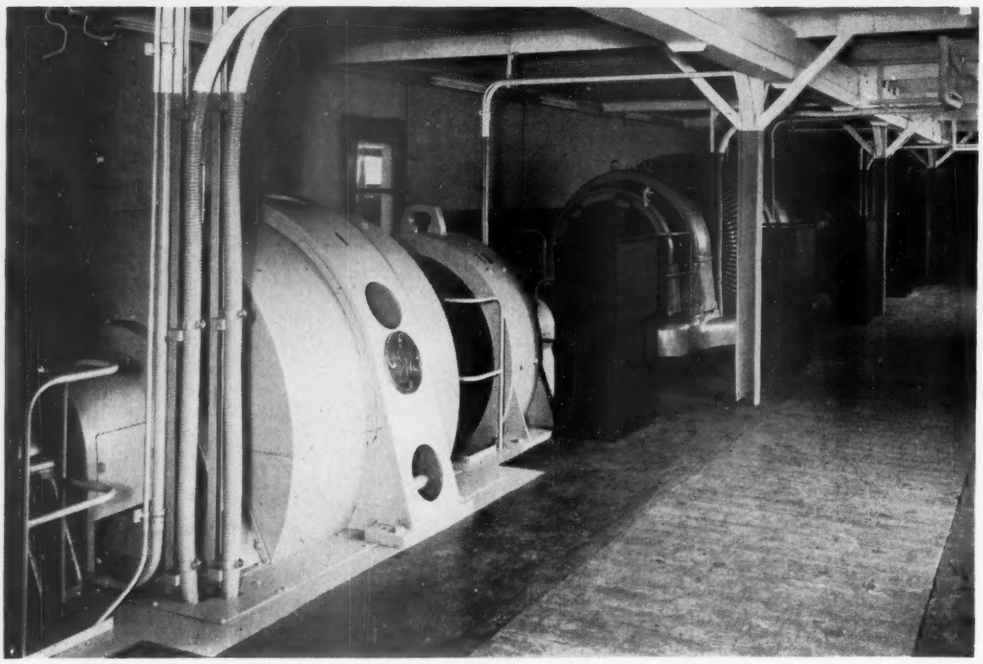


**Fans and blowers of various types are tested in this large plenum air chamber. It is capable of accurately measuring air flow up to 30,000 cu. ft. per min.**

Much research will be devoted to increasing the output of traction motors and generators within the confines of the many design and size limitations inherent in locomotives. Increased output must be obtained, not by increasing the size of the equipment, but by work-



**Test tables for controlling apparatus have dead-front switches and glass-enclosed high voltage meters.**



**Power for the new test facility is supplied by machines having a total output of 3,500 horsepower.**

ing iron and copper more nearly to their limits. This causes greater heating, the effects of which will be studied through continuous heat runs.

Air-flow tests will include study into three areas: (1) Air flow versus pressure in the commutator chamber, (2) air flow versus speed of self-ventilated machines, and (3) air flow versus static heads developed at constant speeds for blowers on force-ventilated equipment.

Commutation tests will consist of varying the commutating pole flux by bucking or boosting the commutating pole field current with an external source of power. Sparking at the brushes will be measured by observation throughout the speed-load range of the equipment.

Speed-torque characteristics will be investigated by measuring generated voltage at constant speed for prescribed loads and field excitations. Constant speed can be held to within 1/8 r.p.m. accuracy with an oscilloscope trace which is produced by modulating a fixed oscillator with the output of a tachometer generator connected to the test machine.

As part of its test development program, the Locomotive and Car Equipment Department will employ young engineers as supervisors in the new motor development test. In this activity, selected men on the company's rotating test engineering program are afforded an opportunity to supervise the work of other test engineers, as well as that of permanent test men.

# RAILWAY OFFICERS

(*Continued from page 18*)

## FINANCIAL, LEGAL & ACCOUNTING

**C. S. Morse,** tax agent of the ATLANTIC COAST LINE, has been appointed tax commissioner at Wilmington, N.C. Mr. Morse entered the service of the ACL in June 1905, but resigned the next year to accept a position with the Clyde Steamship Company. He re-entered ACL service as clerk-stenographer on January 1, 1914, and subsequently served as chief clerk, assistant tax agent and tax agent, being appointed to the latter position in 1925.

**Roy G. Hillebrand,** assistant secretary of the SOUTHERN PACIFIC at San Francisco, has retired after 44 years of service. He has been succeeded by **Thomas F. Ryan,** chief clerk to secretary.

**R. G. Gilmore** and **H. N. Talbot, Jr.,** have been promoted to assistants to comptroller of the PENNSLYVANIA at Philadelphia. Mr. Gilmore was formerly assistant auditor of passenger traffic and Mr. Talbot was chief statistician at Philadelphia. **D. C. Kelly,** assistant chief claim agent at Chicago, has been advanced to chief claim agent in the office of the general claim agent at Philadelphia.

## OPERATING

**I. S. Clemens,** assistant to superintendent of the LEHIGH & NEW ENGLAND at Pen Argyl, Pa., has been appointed trainmaster at Tadmor, Pa.

**Donald L. Hart,** assistant trainmaster of the DULUTH, SOUTH SHORE & ATLANTIC, has been appointed trainmaster at Marquette, Mich.

**Russell A. Moebius,** who has been with PACIFIC ELECTRIC at Los Angeles for 32 years, has been named general superintendent of transportation. **John D. Puffer,** who has been with PE for 18 years, has been promoted to superintendent of passenger service. **Fred C. Patton,** general superintendent of passenger service since 1948, has been assigned to special duties. **Robert W. Forcier,** with PE for 12 years, has been appointed assistant to general manager.

**George W. Kerner,** superintendent of dining car service of the ATCHISON, TOPEKA & SANTA FE at Chicago, has retired. He is succeeded by **Richard T. Hillyard,** assistant superintendent of dining car service.

Mr. Kerner was born and educated in Berlin, Germany. Upon coming to the United States he worked at the Waldorf-Astoria and Plaza Hotels in New York. In 1908 he entered railroad service with the Canadian Pacific, serving as dining car steward, and later as restaurant and hotel manager. In 1945 he was appointed superintendent of dining car service for the Fred Harvey organization at Chicago, and in 1946 was appointed to the position he held until his retirement.

Mr. Hillyard attended the University of Missouri and Armour Institute, entering the railroad and restaurant business in 1918 as a clerk and general office relief manager at Kansas City. After additional experience in numerous hotel eating houses and dining car positions over the Santa Fe system he was appointed terminal superintendent at Chicago in 1931. In 1947 he was named assistant superintendent of dining car service.

**Charles B. Freeman** has been appointed safety inspector of the ILLINOIS CENTRAL at Chicago.

**E. B. Olding,** acting superintendent, dining service section, of the CHESAPEAKE & OHIO, at Cincinnati, has been appointed superintendent dining car service at Ashland, Ky. **R. C. Buchanan** has been named assistant superintendent, dining service section, at Grand Rapids, Mich. **K. S. Cox** has been promoted to assistant to superintendent at Ashland.

## TRAFFIC

**Neil R. McCormick,** general freight and passenger agent of the NEW YORK CENTRAL SYSTEM at Washington, D.C., has been appointed assistant general freight agent at Buffalo, N.Y., succeeding **George E. Taylor,** who has retired after 32 years with this road. Mr. McCormick will have jurisdiction over freight traffic solicitation in western New York, including Rochester and Corning areas, and in north-central Pennsylvania.

**Herald S. Smith,** district freight agent of the BALTIMORE & OHIO, has been promoted to assistant general freight agent, with headquarters as before at Cincinnati, succeeding **H. N. Bauer,** who retired recently after 45 years of service with the B&O. **H. R. McCorkel,** division freight agent at Springfield, Ill., has been transferred to Dayton, Ohio, succeeding **C. P. Mabie,** who in turn has been transferred to Cincinnati. **R. C. Loomis,** district freight representative at Kansas City, Mo., has been appointed division freight agent at Springfield, succeeding Mr. McCorkel.

**E. J. Forster,** general freight agent of the CHICAGO GREAT WESTERN, has been named assistant freight traffic manager at Chicago. He is succeeded by **H. O. Malm,** assistant general freight agent, who in turn is replaced by **F. K. Brennan.**

**Albert C. Ziegan,** general passenger agent of the SOUTHERN PACIFIC at New Orleans, will retire on December 31 after 47 years of service. He will be succeeded by **Frank V. Schaub,** assistant general passenger agent at New Orleans. **Earl Gillett** has been named assistant general passenger agent at San Antonio, Tex.; **J. R. McIntyre,** district passenger agent at New Orleans; and **Murray Songer,** district passenger agent at Beaumont, Tex.

Mr. Ziegan started his rail career as a stenographer for the SP at New Orleans in 1905. Two years later he transferred to the passenger traffic department and served as rate clerk, chief clerk and district passenger agent. In 1943 he was promoted to general passenger agent.

**Dwight L. McCaughan,** general agent of the MINNEAPOLIS & ST. LOUIS at Spokane, Wash., has been promoted to assistant freight traffic manager at Des Moines, Iowa, succeeding **Clyde E. Hill,** who has been appointed special representative at that point. **Gilbert A. Scriven,** general agent at Great Falls, Mont., succeeds Mr. McCaughan as general agent at Spokane, and **Robert W. Christie,** commercial agent at Des Moines, becomes general agent at Great Falls.

**Ernest S. Hughes, Jr.,** commercial agent of the SOUTHERN at Montgomery, Ala., has been promoted to district freight and passenger agent at Minneapolis, Minn. **Charles S. Stagg,** commercial agent at San Francisco, has been promoted to general agent, freight and passenger departments, to head a new office in the Joseph Vance building, Seattle, Wash.

**S. R. Harris** has been appointed assistant to traffic manager of the CHARLESTON & WESTERN CAROLINA at Augusta, Ga., and **Bythel Warrell** has been named general agent at Charleston, S.C.

**J. P. New,** general agent of the CHICAGO & EASTERN ILLINOIS at Milwaukee, has retired. He has been succeeded by **M. L. Rumpf.**

**Louis G. Weber,** assistant general passenger agent of the SEABOARD AIR LINE, has been promoted to general passenger agent, with headquarters as before at New York, succeeding **Herman T. Denning,** who has been transferred to Jacksonville, Fla., to replace **J. R. Bradley, Jr.,** deceased. **V. T. Boatwright, Jr.,** division passenger agent at Norfolk, Va., has been promoted to assistant general passenger agent at New York, to succeed Mr. Weber. **Paul W. Harris,** district passenger agent at Tampa, Fla., succeeds Mr. Boatwright as division passenger agent at Norfolk. **J. F. Thomas, Jr.,** assistant general passenger agent at Jacksonville, has been transferred to Tampa. **Floyd H. Bradley,** traveling passenger agent at Miami, has been promoted to assistant general passenger agent at Jacksonville.

Mr. Weber began his career in railroad passenger work with other lines in New York in 1912 and became associated with the Seaboard in 1939 as

city passenger agent at New York. He was named eastern passenger agent in 1945 and became assistant general passenger agent in May 1947.

**Edgar P. Cilley** has been appointed assistant general freight agent (rates) of the NICKEL PLATE at Cleveland. The position of executive clerk to assistant vice-president—traffic (rates) has been abolished.

The ST. LOUIS-SAN FRANCISCO has opened a traffic office in the National Bank building, Lubbock, Tex. **Howard B. Blagg** heads the office as general agent.

**F. H. Draeger** has been appointed assistant general freight agent of the CHICAGO & EASTERN ILLINOIS.

**A. F. Knauer** has been appointed general agent, passenger department, of the CANADIAN NATIONAL, succeeding **J. E. Myers.**

## PURCHASES & STORES

**Frank J. Loughlin,** assistant purchasing agent of the ERIE, has been appointed purchasing agent. Mr. Loughlin will have headquarters as before at Cleveland. He succeeds **Thomas E. Savage,** who has retired under the pension rules of the company, in his 50th year of continuous service in the purchasing department of the Erie. **John Tapping,** assistant to purchasing agent, has been appointed assistant purchasing agent and **Edward A. Murphy** becomes assistant to purchasing agent.

Frank J. Loughlin

Mr. Savage was born at Passaic, N.J., on November 26, 1887, and entered railroad service in August 1903 in the purchasing department of the Erie. During World War I he served with the United States Army.

Mr. Loughlin was born at Jersey City, N.J., on April 2, 1890, and entered railroad service on September 6, 1904, as messenger in the telegraph department of the Erie. He later served as clerk and chief clerk in the purchasing department, becoming assistant to purchasing agent in July 1939 and assistant purchasing agent in December 1939.

Mr. Tapping was born on November 25, 1903, at Harriman, N.Y., and entered railroad service on September 1, 1920, as messenger and clerk for the Erie. After serving successively as tracing and order clerk in the purchasing department at New York, and as quotation and price clerk at Cleveland, he was appointed assistant to purchasing agent at Cleveland on December 1, 1939.

## MECHANICAL

**W. P. Chesney,** electrical foreman of the CHESAPEAKE & OHIO, has been named electrical engineer of the Pere Marquette district at Grand Rapids, Mich. He succeeds **W. C. Cox,** who has retired. Mr. Cox entered railway service in 1914 with the Pere Marquette as an electrician. In 1915 he became car lighting engineer at Bay City, Mich. Three years later he was named electrical foreman. After six months he was again promoted, this time to powerhouse engineer. In 1950 he was appointed electrical engineer.

W. P. Chesney

Mr. Chesney began his railway career with the PM in 1918 as a car lighting electrician at Bay City. In 1922 he became associated with the Robert Gage Coal Company at St. Charles, Mich., but four years later returned to the PM as road electrician at Saginaw. In 1941 he was promoted to electrical inspector and in 1944 became electrical foreman at Grand Rapids. He held this last position until his recent appointment as electrical engineer.

**W. C. Barrer,** superintendent car department of the CHICAGO & NORTH WESTERN, has been named assistant superintendent of car shops at Chicago. **C. P. Nelson,** assistant superintendent of car shops, has been named general supervisor air conditioning at Chicago. **E. F. Iverson** has become district supervisor car maintenance of the Wisconsin (except Chicago terminal district), Madison, Dakota, Lake Shore, Ashland, and Peninsula divisions, with headquarters at Chicago.

**H. G. Cronnoble** succeeds **H. H. Thomas,** who has retired as master mechanic at Green Bay, Wis. **J. L. Reed** has been appointed master mechanic at St. Paul, succeeding Mr. Cronnoble.

**W. J. Strout,** chief engineer and acting mechanical superintendent of the BANGOR & AROOSTOOK at Houlton, Me., has been appointed chief engineer and mechanical superintendent.

## OBITUARY

**John W. Reed,** assistant engineer, Western region, of the PENNSYLVANIA, died on December 3 at Chicago.

**John S. Bannon,** retired assistant personnel officer of the CHICAGO & NORTH WESTERN, died on November 20 at Chicago.

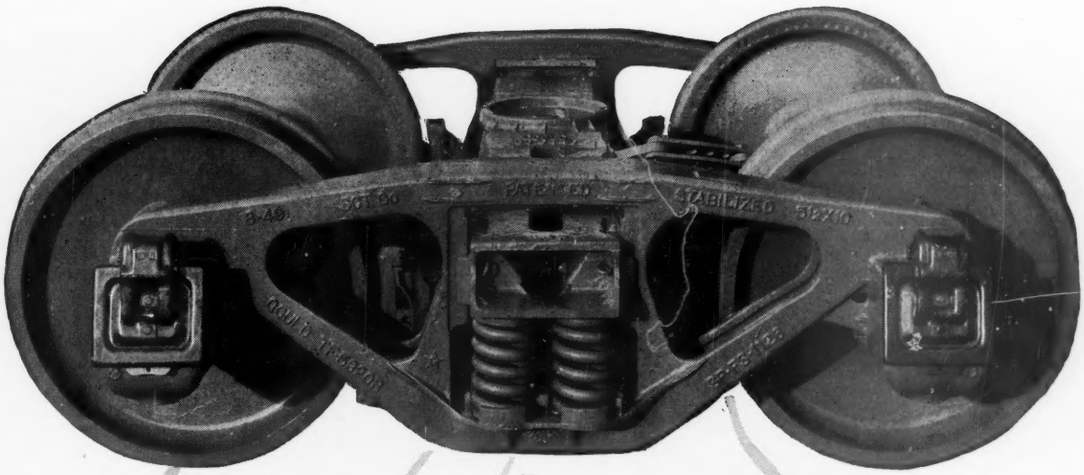
**William L. Kelly,** assistant auditor of disbursements of the ILLINOIS CENTRAL, died on December 3 at Chicago.

**John P. Kilty,** general manager of mail, baggage and express for the CHICAGO, ROCK ISLAND & PACIFIC, died on November 29 in Chicago.

**J. M. Prickett,** 65, who retired in February as vice-president of the KANSAS CITY SOUTHERN, died on December 6 at his home in Kansas City. A photograph and biography of Mr. Prickett were published in *Railway Age* March 17, pages 119 and 120.

**George P. Butcher,** general storekeeper of the NORFOLK & WESTERN at Roanoke, Va., died recently. Mr. Butcher was born at Hampden Sydney, Va., and joined the N&W as a clerk in the Roanoke shops in September 1907. Two years later he transferred to the supply department and was promoted to assistant storekeeper in December 1919, advancing to general foreman of stores in August 1927, assistant general storekeeper in June 1940, and general storekeeper in January 1950.

**Claude B. Matthai,** general solicitor of the UNION PACIFIC, died on November 24 at Linwood, Neb. Mr. Matthai began his railroad career as a clerk in the division freight office of the Burlington at Council Bluffs in 1900, joining the UP as a stenographer in the law department in 1902. Seven years later he became chief clerk in that department. While serving in that capacity he attended Creighton University night law school, and was admitted to practice in 1914. From 1917 to 1932 he was an attorney for the UP, and from 1921 served concurrently as assistant secretary of system lines. In 1932 he became assistant general attorney and in 1935 general attorney. Seven years later he became assistant general solicitor, and was appointed general solicitor in 1949.



# BARBER

## STABILIZED TRUCK

## takes them all (LIGHT LOADS / MEDIUM LOADS / HEAVY LOADS) in its stride

***Thanks to Variable Friction***

All loads "look alike" to Barber Stabilized Trucks; they are designed to adapt themselves to all conditions encountered in freight service. The patented variable pressure of the friction elements automatically adjusts itself to all loadings, from empty to maximum—and to all speeds.

In addition, Barber *Side* Springs carry part of the load, increasing capacity.

These facts are proved by Test Data—and by Analysis of Savings in damage claims on Barber-equipped cars.

***Over 315,000 car sets of Barber Stabilized Trucks have been specified.***

5910RR

**STANDARD** CAR TRUCK COMPANY
332 SOUTH MICHIGAN AVENUE, CHICAGO, ILLINOIS

(*Continued from page 15*)
tices which violate recently enacted amendments to the Civil Aeronautics Act. A board statement said that in view of "apparent continuing violations," the C.A.B. is preparing to undertake appropriate enforcement action in a number of cases.

Complaints from the public, and other information, indicate a large number of ticket agents engaged in the sale of air transportation have persisted in unlawful practices, the statement said. It went on to ask that all agents "review their practices and activities and effect immediately all corrective action necessary to achieve full compliance."

The statement contained 13 examples of what the board called "deceptive practices or unfair methods of competition." These were included "for the guidance of all concerned." The recent amendments to the Civil Aeronautics Act made ticket agents as well as air carriers subject to provisions on unfair practices, rebating, and other rate-cutting devices.

## Briefly . . .

**. . . "Santa Claus tickets"—a 15-cent round trip from any station in suburban territory to downtown Chicago—have been offered by the Chicago & North Western for travel on the five Saturdays before Christmas. The plan, which was started two years ago and which this year is being offered for a more extended period, applies to all children from five to 12 years of age who are accompanied by an adult. A normal half-fare round trip from the most distant suburban point on the system, Williams Bay, Wis., is $2.02. The tickets are not sold on trains and in cases where agencies are closed on Saturday, they must be purchased in advance.**

**. . . The Canadian National has lodged a $250,000 damage claim against the Lakeshore Construction Company, general contractors of Pointe Claire, Que., whose trailer truck derailed a CNR passenger train near Valois Station outside Montreal on November 18. Donald Gordon, CNR chairman and president, said there is a large amount of eye-witness testimony that the driver drove his truck into the path of the approaching train despite the fact automatic warning signals were working, the train was clearly visible and the whistle blowing.**

**. . . Another link in the Western Pacific's centralized traffic control system was opened on November 14, when C.T.C. jurisdiction was extended eastward from Wendover, Utah, to Delle, about 70 miles. The project, now 94 per cent complete, will ultimately cover the entire main line from Oakland, Cal., to Salt Lake City.**

**. . . The Rock Island has marked some 200 freight cars with distinctive "Scotchlite" reflective markings to boost nighttime visibility. All the road's passenger cars and diesel freight locomotives have already been so treated and the road's safety program calls for all switching locomotives to receive this treatment next.**

## I.C.C. Advised to O.K. MP, SP Fare Increases

Examiner A. T. Palmer has recommended in a proposed report that the Interstate Commerce Commission approve the 10 per cent increase in passenger fares which is being sought by the Missouri Pacific and Southern Pacific and their affiliates.

The proceeding is docketed as No. 31050. The application was filed more than seven months ago. (*Railway Age*, May 12, page 77.)

## "Who Is Going to Pay?" Grotz Asks Auto Club

Organized motorists and automobile associations can "exert their wise influence in shaping road programs required by 99 per cent of motor vehicles, well within the bounds of a sound governmental fiscal policy," W. Arthur Grotz, president of the Western Maryland, told the Automobile Club of Maryland in a recent address at Baltimore.

The railroads, Mr. Grotz said in part, do not seek to impose unfair restrictions on trucks; their objective is limited to "open competition between all modes of transportation on equal terms." Neither, he added, are railroads or railroad people opposed to adequate roads. But "we distinguish between the desirability of improvement of thousands of miles of roads on the one hand, and the concentration of attention on a relatively few miles of extremely expensive multi-lane highways, on the other . . . the latter designed expressly to permit highway trailers to operate side by side and with those easy grades which would permit minimum-powered diesel tractors to speed with freight car loads."

"A clever name," the WM chief executive continued, "has been given to a nationwide advertising campaign for super-highways. The name is PAR —Project Adequate Roads. With apparently unlimited advertising budgets and imagination, this program has developed, in the minds of some, into requiring national expenditures of about $7 billion a year for 15 years, or $105 billion . . . These figures would seem like fantastic dreams if it were not for the seductive power of modern propaganda on the masses of partially informed voters . . . Everybody is in favor of adequate roads [just as] everybody is against sin. It is the implementing of the campaign with specific projects by those having a private axe to grind that may catch the great majority of the voters inadequately informed. It is the question, 'Who is going to pay—and how?' that requires thought."

## Motor Carriers Must File Data on Driver Hours, Pay

Class I truckers and bus operators have been ordered by the Interstate Commerce Commission to include data on man-hours paid for and compensation of drivers in their quarterly reports to the commission. The requirement becomes effective with returns for the first quarter of 1953.

## Bangor & Aroostook Issues New Magazine

"Maine Line," a new magazine, 5 in. by 7 in. in size, is now being published monthly by the Bangor & Aroostook for distribution to all its employees, active, retired and in military service.

The first issue, dated November-December, consists of 40 pages; the leading article describes the 507 heater-refrigerator cars being built for the B&A by the Pacific Car & Foundry Co. Publication is under direction of the railroad's personnel and public relations department, with Kenneth S. Ludden and Richard W. Sprague as editor and assistant editor, respectively.

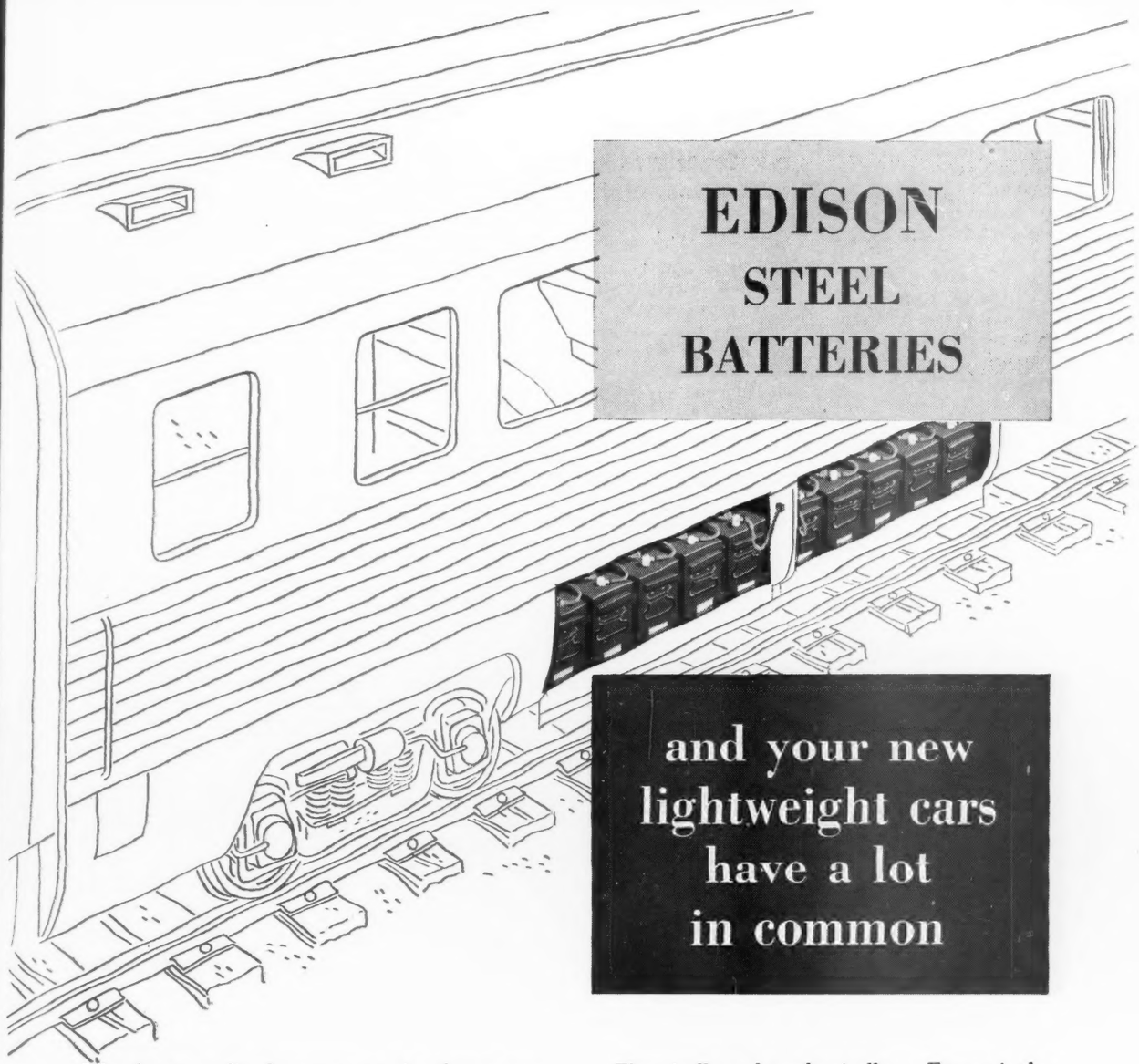
## Erie Opens Corning Track Relocation

What is said to be one of the largest railroad relocation projects ever completed in New York state, was recently opened by the Erie in Corning, N.Y.

The project, costing in the neighborhood of $12 million, involved construction of a new seven-mile railroad line through the north part of the city, construction of new passenger and freight stations, and erection of 21 major structures for separation of street and railroad grades and for crossing streams; all told, the new line eliminates 25 grade crossings, 19 of them on the Erie. Approximately two million cubic yards of embankment were required.

## Farmer "Picks Up Check" For Regulation—Mackie

The American farmer picks up the check for expenses incurred by American railroads in complying with a long list of burdensome and unnecessary regulations. That was the message given by David I. Mackie, vice-president and general counsel of the Delaware, Lackawanna & Western, to the 44th annual meeting of the Vegetable



# EDISON STEEL BATTERIES

## and your new lightweight cars have a lot in common

Like the streamlined passenger trains they serve, EDISON batteries are amazingly strong *yet unusually light.* Inside and out, each cell is made of steel. Result is the strongest cell construction known . . . plus a weight saving up to 2,000 pounds per car.

Electrically, too, they're unique. There are no finish-rate limitations. Recovery after every interval of discharge can be just as rapid as generator output permits. Result: high road capacity . . . seldom any need for yard charging. They have no discharge limits; will operate self-regulating inversion equipment correspondingly longer in emergencies.

What's more, overcharging, over-discharging, even accidental reverse-charging or short circuiting can't harm them.

Electrically and mechanically an EDISON is the *most dependable* battery you can buy. Add to this a service life so long that it results in the lowest over-all cost of operation. For more facts, send for Bulletin SB 3802; see your Edison field engineer.

***Most Dependable Power—***
***Lowest Over-all Cost . . .***
***you get <u>both</u> with an* EDISON**

**EDISON**
*Nickel · Iron · Alkaline*
STORAGE BATTERIES
Edison Storage Battery Division of
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Growers Association of America at Tampa, Fla., on December 2.

"We are not asking that our . . . competition be restricted," he explained. But, he continued: "We want the rate adjustment procedure speeded up. . . . We ask that the law be changed to give the Interstate Commerce Commission the right of review in local cases [of service curtailment]. . . . We ask that the rate determining policy of the I.C.C. be changed from one of guessing price effect upon business volume to one based upon creating earnings that will permit the railroads to live in economic health in a free enterprise system."

In closing, Mr. Mackie reminded his farm audience that railroads were the first great industry to be regulated, the first to be seized, and could be expected to be the first to be socialized—if government regulations were to continue, to bring about its economic death; repeated that the railroads ask only a "fair break" with competing forms of transportation; and warned that the nation would never be strong in peace or war without the "great iron carriers."

## Three Railroads Join as Hosts to Teachers

The three major railroads serving the San Francisco Bay area were joint hosts to a large group of San Francisco public school teachers on Business Education Day, November 21. This is an annual event arranged by the Chamber of Commerce and the San Francisco Board of Education, in which major industries of all types sponsor tours of their establishments and give outlines of business procedure.

Accompanied by officers of the three railroads, the tour began at the Santa Fe passenger terminal in San Francisco, and went by Santa Fe motor coach to the company's new freight terminal and tug and barge operation at China Basin. A Southern Pacific ferry boat took the group across the bay for an inspection of the SP diesel shops and a demonstration ride, including train washing, in the Western Pacific yard, where luncheon was served aboard two WP dining cars. Back in San Francisco, officers of the three railroads met in the SP general offices and conducted a panel session on 12 phases of railroad operation for the benefit of the assembled visitors, each of whom was given a packet of informative material relating to the industry.

## NP Traffic Men Hear Industrial Sales Managers

About 150 Northern Pacific traffic representatives came from offices in 21 states and three Canadian provinces to attend a sales meeting in St. Paul on December 4 and 5.

An unusual feature of this meeting was the inclusion of outside speakers. William H. Gove, sales development manager of the Minnesota Mining & Manufacturing Co.'s cellophane tape sales department, and Edward A. Cashin, vice-president and Minneapolis manager of Batten, Barton, Durstine & Osborne, advertising agents, both spoke on salesmanship.

Williston basin oil developments and their effect on the NP were outlined by LeRoy H. Hines, vice-president in charge of the road's oil development department. The two-day meeting concluded at a dinner at which President Robert S. Macfarlane outlined company plans for 1953.

## 1952's 2nd Quarter Loading Estimate Was 13.2% High

The 13 Regional Shippers Advisory Boards overestimated car loadings for the second quarter of 1952 by 13.2 per cent, according to the latest comparison of forecasts with actual loadings. Chairman A. H. Gass of the Car Service Division, Association of American Railroads, issued the comparison.

Mr. Gass reported that each of the 13 boards overestimated second-quarter loadings. Highest error was an overestimate of 29.6 per cent. One board's overestimate was 0.3 per cent, and this was the best showing among the group.

The boards overestimated loadings in 21 of the 32 commodity groups, and underestimated loadings in 11 groups. The range was from an overestimate of 33.2 per cent for ore and concentrates, to an underestimate of 44.5 per cent on cotton. A 44.5 per cent underestimate also was made in the "frozen foods, fruits and vegetables" group.

In addition to that on ore and concentrates, the shipper boards overestimated loadings on iron and steel by 29.7 per cent; coal and coke by 15.6 per cent; brick and clay products by 14.7 per cent; paper, paper board and prepared roofing by 14.3 per cent, and chemicals and explosives by 11.6 per cent.

The range of underestimates by commodities was from 0.3 per cent for "cotton seed, soybean-vegetable cake and meal, excluding oil," to the 44.5 per cent on cotton and "frozen foods." There was a 7.9 per cent underestimate on poultry and dairy products, and a 7.6 underestimate on both "automobiles and trucks" and "fertilizers, all kinds."

COMPARISON: ESTIMATED NATIONAL FORECAST, REGIONAL SHIPPERS ADVISORY BOARDS, WITH ACTUAL CARLOADINGS, SECOND QUARTER 1952

| BOARD | Carloadings Second Quarter 1952 Estimated | Actual | Percentage of Accuracy Over Est'd. | Under Est'd. |
|---|---|---|---|---|
| Central Western | 237,612 | 204,852 | 13.8 | |
| Pacific Coast | 382,942 | 378,783 | 1.1 | |
| Pacific Northwest | 262,316 | 233,901 | 10.8 | |
| Great Lakes | 661,480 | 540,105 | 18.3 | |
| Ohio Valley | 1,006,989 | 894,325 | 11.2 | |
| Midwest | 874,769 | 758,526 | 13.3 | |
| Northwest | 766,766 | 540,105 | 29.6 | |
| Trans-Mo-Kansas | 363,211 | 362,060 | 0.3 | |
| Southeast | 1,060,955 | 1,018,135 | 4.0 | |
| Southwest | 503,471 | 501,174 | .0.5 | |
| New England | 122,832 | 106,638 | 13.2 | |
| Atlantic States | 848,534 | 742,212 | 12.5 | |
| Allegheny | 1,054,846 | 787,771 | 25.3 | |
| Totals | 8,146,723 | 7.068,587 | 13.2% | 00.0% |

## Railroad Fined

The Interstate Commerce Commission has been advised that on November 17, in the U.S. District Court at Asheville, N.C., the Southern and its trainmaster, Shepard S. Lewis, "each pleaded *nolo contendere* to a joint information in two counts, and were fined $5,000 and $100, respectively."

Acting Secretary George W. Laird of the I.C.C. said in a December 3 "memorandum for the press" that the Southern and its trainmaster were charged with violating Section 20(7)(b) of the Interstate Commerce Act through the making of false entries in records kept by the railroad.

## Waybill Studies

Additional waybill studies issued by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission, include:

Statement No. 5246, Mileage Block Distribution of Traffic and Revenue, by Commodity Class, Territorial Movement and Type of Rate, Manufactures and Miscellaneous and Forwarder Traffic (C.L.)—All Terminations in 1951.

## What About Lean Years? Atkinson Asks T-M-K Board

Despite a decade of peak transportation, the railroads, since 1940, have averaged a return on net investment of only 4½ per cent, Arthur K. Atkinson, president of the Wabash, told the Trans-Missouri-Kansas Shippers Board in St. Louis on December 4. Public utilities, he pointed out, customarily earn twice that much, and manufacturers average four times that figure.

"Such a record has prevented any possibility of obtaining equity financing to pay for expansion of rail facilities. It keeps the railroads from setting aside reserves for any lean years . . . We sincerely believe our record of improved performance without a proportionate increase in earnings conclusively proves the existence of basic faults in the regulatory law and its administration. These faults are beyond our control and can be cured only by congressional action supported by an understanding public."

Mr. Atkinson called upon Congress for:

(*Continued on page* 74)

# Township Thanks Railroad

**The Fairport, Painesville & Eastern Railroad Company received the following letter from the Board of Trustees of Painesville Township, Ohio:**

Gentlemen:

The attention of the Board of Trustees of Painesville Township has been called to the condition of the various railroad crossings in Painesville Township. Their inspection has resulted in a motion passed by the Painesville Township Trustees at their meeting Sept. 13, 1951, formally instructing the Clerk to write a letter to the officials of the Fairport, Painesville & Eastern Railroad, thanking them for their efforts to keep their crossings improved and in safe condition for traffic. Your cooperation merits the appreciation which this letter tries to convey to the officials and others responsible.

Respectfully yours,
Philip W. Baker
Clerk

## FOR KOPPERS PANEL CROSSINGS

**The F. P. & E. R.R. Co.** wrote us that " . . . all of the crossings referred to were supplied by Koppers. In March, 1948, we purchased our first Koppers Pressure-Creosoted Panel Grade Crossings and subsequently have purchased 15 more. All of these crossings are giving us excellent service. That they are equally satisfactory to the public agencies responsible for road conditions is indicated by the letter from the Township Trustees."

Koppers Creosoted Grade Crossings are made to last. The panel method of construction offers easy installation. Completely assembled individual panels are securely fastened to withstand vibration, swelling or shrinking of the wood. When the track is worked, the crossings may be removed and replaced, using all the original material.

Write for a copy of the new folder on KOPPERS GRADE CROSSINGS. It contains construction details and technical data on crossings that not only save money but also earn public applause for doing a good job.

**KOPPERS COMPANY, INC. · Pittsburgh 19, Pa.**

**KOPPERS PRESSURE-TREATED WOOD**

## Freight Operating Statistics of Large Railways — Selected Items

| Region | Road | Year | Miles of road operated | Locomotive Miles: Train-miles | Locomotive Miles: Principal and helper | Locomotive Miles: Light | Car Miles: Loaded (*thousands*) | Car Miles: Per cent loaded | Ton-Miles (*thousands*): Gross excl. locos. & tenders | Ton-Miles (*thousands*): Net rev. and non-rev. | Road-locos. on lines: Serviceable: Unstored | Road-locos. on lines: Serviceable: Stored | Road-locos. on lines: B.O. | Road-locos. on lines: Per Cent B.O. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New Eng. Region | Boston & Maine | 1952 | 1,690 | 246,472 | 253,206 | 11,526 | 9,362 | 70.7 | 584,328 | 251,099 | 79 | 11 | 11 | 10.9 |
| | | 1951 | 1,690 | 242,745 | 250,523 | 13,071 | 9,537 | 72.4 | 588,538 | 259,974 | 83 | 5 | 14 | 13.7 |
| | N. Y., N. H. & Htfd. | 1952 | 1,765 | 286,849 | 286,927 | 18,048 | 11,472 | 71.2 | 701,817 | 310,192 | 100 | .. | 2 | 2.0 |
| | | 1951 | 1,766 | 272,508 | 273,107 | 18,853 | 10,802 | 71.0 | 659,602 | 290,261 | 96 | .. | 6 | 5.9 |
| Great Lakes Region | Delaware & Hudson | 1952 | 793 | 215,962 | 226,000 | 8,708 | 10,455 | 74.5 | 717,967 | 390,488 | 69 | 58 | 11 | 8.0 |
| | | 1951 | 793 | 237,877 | 276,181 | 20,924 | 10,745 | 75.4 | 739,241 | 412,763 | 113 | 18 | 15 | 10.3 |
| | Del., Lack. & Western | 1952 | 962 | 272,079 | 288,083 | 26,074 | 13,119 | 72.0 | 854,196 | 404,166 | 74 | 5 | 2 | 2.5 |
| | | 1951 | 964 | 266,285 | 284,813 | 27,429 | 12,329 | 72.0 | 798,939 | 374,319 | 78 | 11 | 10 | 10.1 |
| | Erie | 1952 | 2,242 | 614,445 | 621,270 | 32,591 | 35,570 | 69.7 | 2,228,212 | 928,871 | 181 | 5 | 2 | 1.1 |
| | | 1951 | 2,243 | 623,160 | 633,796 | 37,377 | 34,867 | 66.9 | 2,235,172 | 910,240 | 174 | 26 | 14 | 6.5 |
| | Grand Trunk Western | 1952 | 952 | 241,357 | 248,195 | 2,198 | 8,550 | 66.1 | 570,511 | 249,890 | 60 | .. | 12 | 16.7 |
| | | 1951 | 952 | 255,674 | 262,395 | 2,348 | 8,630 | 65.2 | 589,057 | 260,119 | 56 | 1 | 14 | 19.7 |
| | Lehigh Valley | 1952 | 1,206 | 229,319 | 234,073 | 10,975 | 11,530 | 73.6 | 770,349 | 384,654 | 35 | .. | .. | .. |
| | | 1951 | 1,211 | 237,409 | 248,661 | 19,381 | 12,288 | 72.3 | 813,672 | 396,061 | 44 | 5 | 5 | 9.3 |
| | New York Central | 1952 | 10,668 | 2,683,236 | 2,761,230 | 116,807 | 107,673 | 64.4 | 7,633,629 | 3,563,473 | 783 | 103 | 215 | 19.5 |
| | | 1951 | 10,675 | 2,887,010 | 3,031,128 | 159,129 | 110,482 | 63.5 | 7,890,332 | 3,616,060 | 891 | 127 | 416 | 29.0 |
| | New York, Chic. & St. L. | 1952 | 2,160 | 762,601 | 792,093 | 9,483 | 31,219 | 69.7 | 2,186,077 | 1,036,317 | 194 | 4 | 46 | 18.9 |
| | | 1951 | 2,161 | 755,919 | 780,249 | 6,607 | 30,758 | 66.7 | 2,140,844 | 998,496 | 202 | 15 | 38 | 14.9 |
| | Pitts. & Lake Erie | 1952 | 221 | 73,052 | 75,180 | 32 | 3,756 | 74.4 | 312,590 | 201,407 | 39 | 4 | 11 | 20.4 |
| | | 1951 | 221 | 86,506 | 88,634 | 70 | 3,658 | 73.2 | 296,345 | 185,209 | 25 | 3 | 20 | 41.7 |
| | Wabash | 1952 | 2,381 | 511,094 | 515,708 | 8,506 | 22,486 | 70.7 | 1,414,473 | 602,611 | 110 | 30 | 38 | 21.3 |
| | | 1951 | 2,381 | 507,425 | 512,634 | 7,986 | 21,911 | 72.0 | 1,377,674 | 609,864 | 122 | 15 | 41 | 23.9 |
| Central Eastern Region | Baltimore & Ohio | 1952 | 6,082 | 1,628,335 | 1,846,866 | 192,017 | 68,649 | 65.6 | 5,201,925 | 2,655,219 | 534 | 37 | 184 | 24.4 |
| | | 1951 | 6,083 | 1,716,367 | 1,999,638 | 233,067 | 69,775 | 64.9 | 5,274,581 | 2,664,867 | 632 | 74 | 191 | 21.3 |
| | Central of New Jersey | 1952 | 411 | 71,701 | 72,387 | 4,122 | 2,871 | 68.3 | 213,318 | 112,969 | 23 | .. | 1 | 4.2 |
| | | 1951 | 412 | 70,835 | 71,182 | 3,673 | 2,938 | 67.9 | 211,751 | 112,575 | 42 | .. | 4 | 8.7 |
| | Central of Pennsylvania | 1952 | 207 | 62,220 | 67,148 | 8,394 | 2,702 | 71.0 | 196,322 | 108,078 | 31 | 2 | 4 | 10.8 |
| | | 1951 | 210 | 67,212 | 74,527 | 12,686 | 2,600 | 71.0 | 189,740 | 103,778 | 32 | 1 | 6 | 15.4 |
| | Chicago & Eastern Ill. | 1952 | 868 | 127,880 | 127,880 | 2,939 | 5,449 | 69.5 | 366,024 | 182,306 | 29 | .. | 2 | 6.5 |
| | | 1951 | 886 | 128,074 | 128,074 | 3,646 | 5,092 | 70.1 | 335,863 | 165,950 | 27 | .. | 3 | 10.0 |
| | Elgin, Joliet & Eastern | 1952 | 236 | 94,175 | 95,688 | 966 | 3,704 | 66.8 | 295,469 | 164,960 | 39 | .. | 3 | 7.1 |
| | | 1951 | 238 | 103,654 | 104,536 | 958 | 4,231 | 66.3 | 342,726 | 193,364 | 43 | .. | .. | .. |
| | Pennsylvania System | 1952 | 9,961 | 2,991,721 | 3,227,345 | 312,406 | 134,299 | 69.6 | 9,438,522 | 4,803,830 | 1,035 | 74 | 342 | 23.6 |
| | | 1951 | 10,045 | 3,116,660 | 3,388,436 | 368,324 | 137,287 | 67.5 | 9,771,130 | 4,956,351 | 1,142 | 101 | 353 | 22.1 |
| | Reading | 1952 | 1,318 | 347,709 | 353,433 | 22,333 | 14,036 | 68.8 | 1,084,667 | 601,476 | 159 | 16 | 22 | 11.2 |
| | | 1951 | 1,311 | 366,402 | 378,177 | 25,490 | 13,370 | 67.5 | 1,039,648 | 371,417 | 171 | 31 | 35 | 14.8 |
| | Western Maryland | 1952 | 836 | 185,758 | 218,049 | 27,053 | 6,631 | 67.3 | 532,021 | 307,747 | 126 | 5 | 10 | 7.1 |
| | | 1951 | 837 | 175,398 | 208,895 | 24,813 | 6,286 | 65.3 | 505,970 | 284,234 | 124 | 8 | 19 | 12.6 |
| Pocahontas Region | Chesapeake & Ohio | 1952 | 5,036 | 1,342,191 | 1,391,149 | 46,440 | 65,460 | 58.1 | 5,703,761 | 3,223,193 | 433 | 63 | 179 | 26.5 |
| | | 1951 | 5,043 | 1,491,234 | 1,575,336 | 69,616 | 69,845 | 56.7 | 6,179,422 | 3,473,207 | 501 | 7 | 242 | 32.3 |
| | Norfolk & Western | 1952 | 2,113 | 719,732 | 763,003 | 53,386 | 34,395 | 58.8 | 3,094,973 | 1,693,925 | 225 | 33 | 22 | 7.9 |
| | | 1951 | 2,113 | 773,980 | 828,964 | 66,033 | 36,938 | 59.1 | 3,315,000 | 1,825,071 | 244 | 12 | 20 | 7.2 |
| Southern Region | Atlantic Coast Line | 1952 | 5,460 | 747,524 | 747,557 | 7,789 | 23,059 | 61.8 | 1,663,061 | 784,148 | 267 | 16 | 33 | 10.4 |
| | | 1951 | 5,434 | 702,426 | 702,609 | 11,640 | 22,674 | 63.1 | 1,609,538 | 761,637 | 374 | 28 | 129 | 24.3 |
| | Central of Georgia | 1952 | 1,754 | 191,066 | 195,844 | 2,882 | 7,222 | 69.2 | 478,739 | 228,301 | 88 | 22 | 2 | 1.8 |
| | | 1951 | 1,765 | 224,631 | 225,550 | 3,616 | 7,188 | 69.8 | 475,708 | 227,066 | 88 | 6 | 16 | 14.5 |
| | Gulf, Mobile & Ohio | 1952 | 2,718 | 314,942 | 314,942 | 294 | 16,775 | 73.5 | 1,098,285 | 538,957 | 85 | .. | 4 | 4.5 |
| | | 1951 | 2,851 | 307,849 | 307,849 | 177 | 16,105 | 74.8 | 1,035,762 | 511,326 | 80 | .. | 3 | 3.6 |
| | Illinois Central | 1952 | 6,539 | 1,551,282 | 1,556,992 | 52,747 | 56,136 | 65.6 | 4,030,103 | 1,933,684 | 550 | 12 | 82 | 12.7 |
| | | 1951 | 6,539 | 1,471,092 | 1,476,628 | 53,244 | 52,485 | 63.8 | 3,809,908 | 1,794,932 | 568 | 28 | 65 | 9.8 |
| | Louisville & Nashville | 1952 | 4,756 | 967,494 | 1,016,363 | 25,666 | 35,630 | 65.2 | 2,600,553 | 1,342,499 | 247 | 69 | 55 | 14.8 |
| | | 1951 | 4,756 | 1,010,944 | 1,075,091 | 28,601 | 34,579 | 64.3 | 2,526,611 | 1,289,421 | 284 | 58 | 101 | 22.8 |
| | Nash., Chatt. & St. Louis | 1952 | 1,032 | 193,788 | 196,899 | 3,237 | 6,400 | 74.7 | 405,351 | 196,331 | 51 | .. | 2 | 3.8 |
| | | 1951 | 1,049 | 188,845 | 191,819 | 3,016 | 6,181 | 74.3 | 389,966 | 186,983 | 54 | .. | 6 | 10.0 |
| | Seaboard Air Line | 1952 | 4,135 | 559,093 | 559,093 | 530 | 21,798 | 65.7 | 1,522,609 | 709,477 | 146 | 72 | 5 | 2.2 |
| | | 1951 | 4,136 | 584,755 | 584,755 | 910 | 21,246 | 66.1 | 1,475,063 | 692,437 | 172 | 87 | 64 | 19.8 |
| | Southern | 1952 | 6,264 | 1,041,161 | 1,041,249 | 11,695 | 41,038 | 71.8 | 2,581,027 | 1,207,731 | 277 | 69 | 67 | 16.2 |
| | | 1951 | 6,292 | 1,120,675 | 1,124,698 | 13,272 | 40,491 | 72.6 | 2,572,176 | 1,223,531 | 378 | 40 | 109 | 20.7 |
| Northwestern Region | Chicago & North Western | 1952 | 7,872 | 919,142 | 929,398 | 18,397 | 37,511 | 67.5 | 2,632,488 | 1,162,841 | 305 | 5 | 87 | 21.9 |
| | | 1951 | 7,889 | 961,236 | 978,478 | 24,912 | 36,922 | 65.8 | 2,589,094 | 1,199,165 | 334 | 4 | 142 | 29.6 |
| | Chicago Great Western | 1952 | 1,441 | 147,902 | 148,020 | 1,228 | 8,824 | 68.7 | 593,305 | 272,319 | 34 | .. | 1 | 2.9 |
| | | 1951 | 1,441 | 146,011 | 146,306 | 9,281 | 8,413 | 71.1 | 561,664 | 264,779 | 32 | .. | 2 | 5.9 |
| | Chic., Milw., St. P. & Pac. | 1952 | 10,663 | 1,247,163 | 1,287,399 | 51,688 | 50,443 | 63.8 | 3,483,126 | 1,562,236 | 401 | 47 | 77 | 14.7 |
| | | 1951 | 10,664 | 1,311,563 | 1,368,331 | 44,427 | 51,228 | 61.6 | 3,703,046 | 1,682,947 | 421 | 40 | 76 | 14.2 |
| | Chic., St. P., Minn. & Omaha | 1952 | 1,606 | 198,338 | 200,903 | 6,187 | 6,101 | 70.8 | 417,562 | 198,512 | 65 | .. | 26 | 28.6 |
| | | 1951 | 1,606 | 215,625 | 223,224 | 10,491 | 6,363 | 67.6 | 459,484 | 219,051 | 74 | .. | 36 | 32.7 |
| | Duluth, Missabe & Iron Range | 1952 | 569 | 223,151 | 224,378 | 1,952 | 10,153 | 50.4 | 1,064,076 | 640,968 | 81 | .. | 6 | 6.9 |
| | | 1951 | 567 | 203,996 | 205,077 | 1,569 | 9,450 | 50.9 | 979,134 | 584,314 | 62 | .. | 5 | 7.5 |
| | Great Northern | 1952 | 8,301 | 1,289,917 | 1,296,508 | 51,316 | 53,440 | 63.4 | 4,121,110 | 2,098,597 | 352 | 98 | 60 | 11.8 |
| | | 1951 | 8,309 | 1,261,948 | 1,265,206 | 44,256 | 51,183 | 61.6 | 3,987,978 | 2,008,672 | 403 | 82 | 58 | 10.7 |
| | Minneap., St. P. & S. S. M. | 1952 | 4,172 | 444,385 | 450,091 | 5,429 | 15,943 | 67.9 | 1,099,381 | 550,281 | 110 | .. | 8 | 6.8 |
| | | 1951 | 4,173 | 466,145 | 478,490 | 8,149 | 15,943 | 62.4 | 1,166,222 | 568,087 | 114 | .. | 13 | 10.2 |
| | Northern Pacific | 1952 | 6,585 | 912,674 | 944,447 | 43,315 | 37,974 | 67.8 | 2,687,833 | 1,272,705 | 313 | 11 | 77 | 19.2 |
| | | 1951 | 6,591 | 899,752 | 923,553 | 49,874 | 37,577 | 68.6 | 2,679,208 | 1,283,584 | 332 | 14 | 67 | 16.2 |
| Central Western Region | Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) | 1952 | 13,072 | 2,499,191 | 2,614,203 | 112,446 | 106,924 | 67.1 | 7,046,439 | 2,775,291 | 587 | 50 | 128 | 16.7 |
| | | 1951 | 13,096 | 2,506,976 | 2,601,017 | 102,038 | 106,150 | 67.4 | 6,973,986 | 2,777,516 | 630 | 83 | 126 | 15.0 |
| | Chic., Burl. & Quincy | 1952 | 8,773 | 1,300,157 | 1,314,380 | 50,570 | 55,287 | 67.6 | 3,696,406 | 1,689,672 | 357 | 14 | 103 | 21.7 |
| | | 1951 | 8,791 | 1,248,234 | 1,274,070 | 49,073 | 54,085 | 67.0 | 3,624,439 | 1,649,668 | 381 | 18 | 136 | 25.4 |
| | Chic., Rock I. & Pac. | 1952 | 7,902 | 936,872 | 941,488 | 7,154 | 37,048 | 68.1 | 2,550,242 | 1,150,322 | 185 | 38 | 44 | 16.5 |
| | | 1951 | 7,902 | 956,499 | 958,700 | 17,163 | 33,919 | 65.9 | 2,298,363 | 1,053,022 | 216 | 39 | 54 | 17.5 |
| | Denver & R. G. Wn. | 1952 | 2,333 | 406,545 | 444,361 | 52,835 | 18,240 | 71.2 | 1,251,149 | 567,967 | 108 | 21 | 23 | 15.1 |
| | | 1951 | 2,334 | 385,355 | 423,465 | 54,156 | 17,526 | 73.1 | 1,146,226 | 542,793 | 124 | 17 | 21 | 13.0 |
| | Southern Pacific | 1952 | 8,059 | 2,355,247 | 2,488,870 | 313,008 | 101,632 | 65.5 | 6,997,859 | 2,870,340 | 718 | 5 | 145 | 16.7 |
| | | 1951 | 8,077 | 2,186,910 | 2,301,216 | 292,384 | 95,627 | 65.6 | 6,579,705 | 2,719,351 | 719 | 9 | 155 | 17.6 |
| | Union Pacific | 1952 | 9,835 | 3,031,899 | 3,149,866 | 199,901 | 123,058 | 66.6 | 8,300,098 | 3,517,361 | 671 | 14 | 122 | 15.1 |
| | | 1951 | 9,756 | 2,693,977 | 2,806,775 | 191,492 | 114,932 | 67.4 | 7,698,772 | 3,329,336 | 628 | 16 | 133 | 17.1 |
| | Western Pacific | 1952 | 1,190 | 265,789 | 269,865 | 17,259 | 12,568 | 71.2 | 811,090 | 373,522 | 43 | 1 | 4 | 8.3 |
| | | 1951 | 1,190 | 256,665 | 261,113 | 16,328 | 13,291 | 76.1 | 817,670 | 383,952 | 45 | 14 | 24 | 28.9 |
| Southwestern Region | International-Gt. Northern* | 1952 | 1,104 | 167,266 | 167,266 | .... | 6,104 | 69.0 | 456,380 | 212,459 | 45 | 8 | 7 | 11.7 |
| | | 1951 | 1,104 | 188,552 | 188,730 | .... | 6,735 | 68.2 | 470,500 | 227,769 | 47 | 1 | 13 | 21.3 |
| | Kansas City Southern | 1952 | 886 | 167,692 | 167,697 | 394 | 8,997 | 69.1 | 618,038 | 293,174 | 26 | 2 | 8 | 22.2 |
| | | 1951 | 886 | 166,806 | 166,814 | 243 | 9,138 | 68.3 | 615,971 | 287,497 | 25 | 8 | 25 | 43.1 |
| | Mo.-Kans.-Texas Lines | 1952 | 3,230 | 387,929 | 387,929 | 4,426 | 14,838 | 66.6 | 963,682 | 418,904 | 90 | 7 | 8 | 7.6 |
| | | 1951 | 3,230 | 396,366 | 398,583 | 6,042 | 14,995 | 65.7 | 977,772 | 415,396 | 85 | 7 | 21 | 18.6 |
| | Missouri Pacific* | 1952 | 6,932 | 1,249,254 | 1,253,459 | 15,169 | 49,422 | 68.8 | 3,269,222 | 1,465,580 | 297 | 29 | 61 | 15.8 |
| | | 1951 | 6,932 | 1,276,154 | 1,299,685 | 17,617 | 49,127 | 67.8 | 3,302,827 | 1,496,188 | 350 | 3 | 64 | 15.3 |
| | Texas & Pacific | 1952 | 1,832 | 338,335 | 338,335 | 4,017 | 14.133 | 63.8 | 982,381 | 388,969 | 62 | 7 | 6 | 8.0 |
| | | 1951 | 1,844 | 341,890 | 341,890 | 7,763 | 14,100 | 65.2 | 959,161 | 377,194 | 70 | 14 | 42 | 33.3 |
| | St. Louis-San Francisco | 1952 | 4,567 | 628,913 | 629,026 | 6,099 | 24,432 | 65.3 | 1,657,909 | 731,826 | 183 | 15 | 26 | 11.6 |
| | | 1951 | 4,570 | 654,716 | 656,638 | 6,357 | 22,989 | 64.7 | 1,568,606 | 697,047 | 177 | 77 | 96 | 27.4 |
| | St. Louis Southw. Lines | 1952 | 1,562 | 326,865 | 326,925 | 4,467 | 14,113 | 73.5 | 858,814 | 383,902 | 54 | 21 | 13 | 14.8 |
| | | 1951 | 1,562 | 332,793 | 336,584 | 4,531 | 13,904 | 72.7 | 844,567 | 377,533 | 76 | 11 | 19 | 17.9 |
| | Texas & New Orleans | 1952 | 4,280 | 801,498 | 802,418 | 26,119 | 28,227 | 63.2 | 1,976,237 | 858,248 | 221 | .. | 24 | 9.8 |
| | | 1951 | 4,291 | 812,538 | 812,770 | 18,820 | 27,985 | 64.5 | 1,893,464 | 805,466 | 228 | .. | 37 | 14.0 |

## For the Month of September 1952 Compared with September 1951

| | Region, Road and Year | | Freight cars on line: Home | Foreign | Total | Per Cent B.O. | G.t.m.per train-hr. excl.locos and tenders | G.t.m.per train-mi. excl.locos. and tenders | Net ton-mi. per train-mile | Net ton-mi. per l'd car-mile | Net ton-mi. per car-day | Car miles per car-day | Net daily ton-mi. per road-mi. | Train-miles per train-hour | Mile per loco. per day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New Eng. Region | Boston & Maine | 1952 | 1,247 | 8,384 | 9,631 | 3.1 | 38,458 | 2,375 | 1,021 | 26.8 | 897 | 47.3 | 4,953 | 16.2 | 98.6 |
| | | 1951 | 1,238 | 8,099 | 9,337 | 2.3 | 38,621 | 2,427 | 1,072 | 27.3 | 900 | 45.6 | 5,128 | 15.9 | 95.5 |
| | N. Y., N. H. & Htfd. | 1952 | 1,058 | 15,787 | 16,845 | 2.7 | 36,243 | 2,448 | 1,082 | 27.0 | 643 | 33.4 | 5,858 | 14.8 | 115.9 |
| | | 1951 | 1,361 | 13,654 | 15,015 | 3.5 | 35,699 | 2,424 | 1,067 | 26.9 | 612 | 32.1 | 5,479 | 14.7 | 109.6 |
| Great Lakes Region | Delaware & Hudson | 1952 | 3,302 | 6,830 | 10,132 | 3.9 | 60,187 | 3,341 | 1,817 | 37.3 | 1,276 | 45.9 | 16,414 | 18.1 | 61.8 |
| | | 1951 | 2,658 | 6,257 | 8,915 | 7.1 | 57,966 | 3,122 | 1,743 | 38.4 | 1,549 | 53.5 | 17,350 | 18.7 | 66.3 |
| | Del., Lack. & Western | 1953 | 3,251 | 11,691 | 14,942 | 5.2 | 49,625 | 3,185 | 1,507 | 30.8 | 880 | 39.7 | 14,004 | 15.8 | 142.4 |
| | | 1951 | 4,416 | 11,070 | 15,486 | 5.9 | 47,252 | 3,054 | 1,431 | 30.4 | 822 | 37.6 | 12,943 | 15.7 | 117.8 |
| | Erie | 1952 | 6,154 | 23,258 | 29,412 | 3.3 | 65,038 | 3,661 | 1,526 | 26.1 | 1,065 | 58.5 | 13,810 | 17.9 | 131.5 |
| | | 1951 | 5,319 | 24,258 | 29,577 | 3.7 | 63,312 | 3,620 | 1,474 | 26.1 | 1,041 | 59.6 | 13,527 | 17.7 | 113.0 |
| | Grand Trunk Western | 1952 | 3,427 | 9,888 | 13,315 | 5.0 | 47,161 | 2,382 | 1,043 | 29.2 | 629 | 32.5 | 8,750 | 20.0 | 130.0 |
| | | 1951 | 3,466 | 10,100 | 13,566 | 4.2 | 48,035 | 2,322 | 1,025 | 30.1 | 647 | 39.2 | 9,108 | 20.8 | 137.5 |
| | Lehigh Valley | 1952 | 3,505 | 9,071 | 12,576 | 6.1 | 65,439 | 3,433 | 1,714 | 33.4 | 1,013 | 41.3 | 10,632 | 19.5 | 248.3 |
| | | 1951 | 1,960 | 13,694 | 15,654 | 7.2 | 65,434 | 3,470 | 1,689 | 32.2 | 845 | 36.2 | 10,902 | 19.1 | 171.2 |
| | New York Central | 1952 | 63,400 | 98,691 | 162,091 | 9.4 | 47,440 | 2,897 | 1,352 | 33.1 | 715 | 33.5 | 11,134 | 16.7 | 97.0 |
| | | 1951 | 55,006 | 104,025 | 159,031 | 6.9 | 45,811 | 2,779 | 1,274 | 32.7 | 734 | 35.3 | 11,291 | 16.8 | 82.9 |
| | New York, Chic. & St. L. | 1952 | 5,300 | 20,364 | 25,664 | 6.3 | 49,672 | 2,930 | 1,309 | 33.2 | 1,380 | 59.6 | 15,993 | 17.3 | 118.9 |
| | | 1951 | 5,065 | 21,117 | 26,182 | 4.2 | 49,762 | 2,874 | 1,340 | 32.5 | 1,334 | 61.6 | 15,402 | 17.6 | 110.8 |
| | Pitts. & Lake Erie | 1952 | 3,317 | 10,404 | 13,721 | 5.8 | 61,582 | 4,285 | 2,761 | 53.6 | 444 | 11.1 | 30,378 | 14.4 | 53.5 |
| | | 1951 | 3,099 | 8,987 | 12,086 | 10.1 | 53,444 | 3,446 | 2,153 | 50.6 | 467 | 12.6 | 27,935 | 15.6 | 67.5 |
| | Wabash | 1952 | 6,704 | 13,441 | 20,145 | 7.0 | 58,841 | 2,792 | 1,189 | 26.8 | 979 | 51.7 | 8,436 | 21.3 | 105.8 |
| | | 1951 | 7,278 | 14,463 | 21,741 | 6.3 | 56,220 | 2,738 | 1,212 | 27.8 | 974 | 48.6 | 8,538 | 20.7 | 99.0 |
| Central Eastern Region | Baltimore & Ohio | 1952 | 45,980 | 47,633 | 93,613 | 8.9 | 44,477 | 3,241 | 1,654 | 38.7 | 926 | 36.5 | 14,552 | 13.9 | 93.9 |
| | | 1951 | 43,134 | 52,930 | 96,064 | 5.4 | 43,095 | 3,117 | 1,575 | 38.2 | 911 | 36.7 | 14,603 | 14.0 | 86.3 |
| | Central of New Jersey | 1952 | 378 | 9,934 | 10,312 | 3.1 | 36,248 | 3,134 | 1,660 | 39.3 | 401 | 14.9 | 9,162 | 12.2 | 168.1 |
| | | 1951 | 338 | 8,354 | 8,692 | 3.1 | 37,300 | 3,124 | 1,661 | 38.3 | 408 | 15.7 | 9,108 | 12.5 | 86.5 |
| | Central of Pennsylvania | 1952 | 1,306 | 3,698 | 5,004 | 16.7 | 45,593 | 3,354 | 1,846 | 40.0 | 760 | 26.7 | 17,404 | 14.4 | 80.7 |
| | | 1951 | 1,349 | 3,497 | 4,846 | 20.5 | 41,482 | 3,043 | 1,665 | 39.9 | 715 | 25.3 | 16,473 | 14.7 | 96.5 |
| | Chicago & Eastern Ill. | 1952 | 2,051 | 4,169 | 6,220 | 4.5 | 43,883 | 2,876 | 1,433 | 33.5 | 1,030 | 44.3 | 7,001 | 15.3 | 155.8 |
| | | 1951 | 1,495 | 3,132 | 4,627 | 9.4 | 43,004 | 2,633 | 1,301 | 32.6 | 1,250 | 54.7 | 6,243 | 16.4 | 158.6 |
| | Elgin, Joliet & Eastern | 1952 | 6,619 | 14,207 | 20,826 | 5.4 | 21,904 | 3,278 | 1,830 | 44.5 | 271 | 9.1 | 23,299 | 7.0 | 110.6 |
| | | 1951 | 5,605 | 16,262 | 21,867 | 2.5 | 20,822 | 3,389 | 1,912 | 45.7 | 302 | 10.0 | 27,082 | 6.3 | 124.4 |
| | Pennsylvania System | 1952 | 100,561 | 105,155 | 205,716 | 10.3 | 49,517 | 3,254 | 1,656 | 35.8 | 780 | 31.3 | 16,075 | 15.7 | 87.8 |
| | | 1951 | 94,612 | 119,155 | 213,867 | 8.6 | 48,877 | 3,238 | 1,642 | 36.1 | 778 | 31.9 | 16,447 | 15.6 | 85.4 |
| | Reading | 1952 | 10,568 | 20,975 | 31,543 | 6.7 | 41,014 | 3,122 | 1,731 | 42.9 | 638 | 21.6 | 15,212 | 13.1 | 70.8 |
| | | 1951 | 10,111 | 21,312 | 31,423 | 4.5 | 36,881 | 2,841 | 1,561 | 42.7 | 615 | 21.3 | 14,529 | 13.0 | 67.6 |
| | Western Maryland | 1952 | 4,029 | 3,142 | 7,171 | 4.1 | 40,228 | 2,922 | 1,690 | 46.4 | 1,339 | 42.9 | 12,271 | 14.0 | 61.1 |
| | | 1951 | 3,450 | 3,396 | 6,846 | 2.9 | 43,120 | 2,927 | 1,644 | 45.2 | 1,365 | 46.2 | 11,320 | 14.9 | 55.5 |
| Pocahontas Region | Chesapeake & Ohio | 1952 | 40,311 | 28,299 | 68,610 | 3.3 | 73,053 | 4,302 | 2,431 | 49.2 | 1,535 | 53.6 | 21,334 | 17.2 | 78.0 |
| | | 1951 | 49,520 | 27,068 | 76,588 | 5.4 | 70,530 | 4,193 | 2,357 | 49.7 | 1,512 | 53.6 | 22,957 | 17.0 | 79.2 |
| | Norfolk & Western | 1952 | 24,200 | 8,490 | 32,690 | 2.1 | 71,879 | 4,387 | 2,401 | 49.2 | 1,566 | 54.1 | 26,722 | 16.7 | 106.2 |
| | | 1951 | 28,448 | 8,858 | 37,306 | 1.6 | 71,518 | 4,360 | 2,400 | 49.4 | 1,635 | 56.0 | 28,791 | 16.7 | 116.3 |
| Southern Region | Atlantic Coast Line | 1952 | 14,480 | 18,206 | 32,686 | 3.1 | 36,911 | 2,235 | 1,054 | 34.0 | 811 | 38.6 | 4,787 | 16.6 | 89.0 |
| | | 1951 | 12,058 | 18,608 | 30,666 | 3.3 | 36,512 | 2,300 | 1,088 | 33.6 | 859 | 40.5 | 4,672 | 15.9 | 49.8 |
| | Central of Georgia | 1952 | 2,431 | 5,933 | 8,364 | 4.9 | 42,161 | 2,516 | 1,200 | 31.6 | 897 | 41.0 | 4,339 | 16.8 | 65.7 |
| | | 1951 | 2,068 | 6,329 | 8,397 | 5.3 | 37,258 | 2,127 | 1,015 | 31.6 | 942 | 42.7 | 4,288 | 17.6 | 75.0 |
| | Gulf, Mobile & Ohio | 1952 | 3,468 | 11,856 | 15,324 | 3.0 | 64,895 | 3,495 | 1,715 | 32.1 | 1,196 | 50.6 | 6,610 | 18.6 | 127.9 |
| | | 1951 | 3,091 | 11,893 | 14,984 | 3.3 | 62,652 | 3,372 | 1,665 | 31.7 | 1,133 | 47.7 | 5,978 | 18.6 | 133.5 |
| | Illinois Central | 1952 | 26,455 | 31,920 | 58,375 | 2.0 | 41,732 | 2,642 | 1,268 | 34.4 | 1,123 | 49.7 | 9,857 | 16.1 | 90.1 |
| | | 1951 | 21,960 | 33,525 | 55,485 | 2.2 | 44,293 | 2,615 | 1,232 | 34.2 | 1,104 | 50.6 | 9,150 | 17.1 | 83.5 |
| | Louisville & Nashville | 1952 | 24,461 | 16,158 | 40,619 | 5.5 | 42,196 | 2,692 | 1,390 | 37.7 | 1,027 | 41.8 | 9,409 | 15.7 | 103.5 |
| | | 1951 | 24,551 | 16,695 | 41,246 | 9.8 | 39,870 | 2,507 | 1,279 | 37.3 | 1,042 | 43.4 | 9,037 | 16.0 | 90.7 |
| | Nash., Chatt. & St. Louis | 1952 | 1,248 | 5,862 | 7,110 | 3.2 | 38,965 | 2,094 | 1,014 | 30.7 | 935 | 40.8 | 6,341 | 18.6 | 126.7 |
| | | 1951 | 1,069 | 5,173 | 6,242 | 4.2 | 39,788 | 2,069 | 992 | 30.3 | 1,010 | 45.0 | 5,941 | 19.3 | 119.7 |
| | Seaboard Air Line | 1952 | 10,101 | 14,949 | 25,050 | 2.2 | 49,386 | 2,752 | 1,282 | 32.5 | 981 | 45.9 | 5,719 | 18.1 | 99.9 |
| | | 1951 | 8,981 | 15,096 | 24,077 | 1.9 | 44,973 | 2,550 | 1,197 | 32.6 | 966 | 44.9 | 5,581 | 17.8 | 69.8 |
| | Southern | 1952 | 15,055 | 21,587 | 36,642 | 4.2 | 41,554 | 2,497 | 1,169 | 29.4 | 998 | 47.2 | 6,427 | 16.8 | 90.6 |
| | | 1951 | 12,337 | 30,148 | 42,485 | 4.2 | 39,275 | 2,311 | 1,099 | 30.2 | 980 | 44.7 | 6,482 | 17.1 | 80.1 |
| Northwestern Region | Chicago & North Western | 1952 | 19,284 | 38,226 | 57,510 | 3.9 | 45,194 | 3,024 | 1,336 | 31.0 | 684 | 32.6 | 4,924 | 15.8 | 82.2 |
| | | 1951 | 18,108 | 34,913 | 53,021 | 4.1 | 42,359 | 2,868 | 1,328 | 32.5 | 731 | 34.2 | 5,067 | 15.7 | 76.2 |
| | Chicago Great Western | 1952 | 1,280 | 5,770 | 7,050 | 2.7 | 69,328 | 4,019 | 1,845 | 30.9 | 1,220 | 57.5 | 6,299 | 17.3 | 148.5 |
| | | 1951 | 1,666 | 5,740 | 7,406 | 2.7 | 65,053 | 3,859 | 1,819 | 31.5 | 1,096 | 49.0 | 6,125 | 16.9 | 164.3 |
| | Chic., Milw., St. P. & Pac. | 1952 | 29,827 | 36,176 | 66,003 | 3.9 | 47,237 | 2,816 | 1,263 | 31.0 | 772 | 39.0 | 4,884 | 16.9 | 91.9 |
| | | 1951 | 28,282 | 41,507 | 69,789 | 3.1 | 46,433 | 2,843 | 1,292 | 32.9 | 810 | 40.1 | 5,261 | 16.4 | 93.1 |
| | Chic., St. P., Minn. & Omaha | 1952 | 1,099 | 8,590 | 9,689 | 3.8 | 32,602 | 2,202 | 1,047 | 32.5 | 681 | 29.6 | 4,120 | 15.5 | 80.5 |
| | | 1951 | 1,086 | 9,114 | 10,200 | 2.4 | 29,274 | 2,240 | 1,068 | 34.4 | 683 | 29.4 | 4,547 | 13.7 | 78.2 |
| | Duluth, Missabe & Iron Range | 1952 | 14,299 | 2,420 | 16,719 | 2.3 | 80,906 | 4,975 | 2,997 | 63.1 | 1,251 | 39.3 | 37,549 | 17.0 | 101.5 |
| | | 1951 | 13,103 | 2,324 | 15,427 | 3.2 | 84,415 | 5,029 | 3,001 | 61.8 | 1,240 | 39.4 | 34,351 | 17.6 | 112.2 |
| | Great Northern | 1952 | 23,047 | 24,373 | 47,420 | 3.0 | 50,135 | 3,243 | 1,651 | 39.3 | 1,374 | 55.1 | 8,427 | 15.7 | 95.7 |
| | | 1951 | 21,694 | 29,173 | 50,867 | 3.2 | 49,416 | 3,202 | 1,613 | 39.2 | 1,368 | 56.6 | 8,058 | 15.6 | 90.2 |
| | Minneap., St. P. & S. S. M. | 1952 | 6,360 | 10,182 | 16,542 | 4.9 | 44,416 | 2,498 | 1,250 | 34.5 | 1,116 | 47.6 | 4,397 | 18.0 | 137.2 |
| | | 1951 | 6,286 | 12,498 | 18,784 | 5.4 | 45,661 | 2,528 | 1,231 | 35.6 | 1,037 | 46.6 | 4,538 | 18.3 | 140.9 |
| | Northern Pacific | 1952 | 17,874 | 17,796 | 35,670 | 4.1 | 50,551 | 2,966 | 1,404 | 33.5 | 1,127 | 49.6 | 6,442 | 17.2 | 89.8 |
| | | 1951 | 18,525 | 21,286 | 39,811 | 5.3 | 49,320 | 3,012 | 1,443 | 34.2 | 1,071 | 45.7 | 6,492 | 16.6 | 85.7 |
| Central Western Region | Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) | 1952 | 43,722 | 36,040 | 79,762 | 4.1 | 61,102 | 2,832 | 1,116 | 26.0 | 1,120 | 64.3 | 7,077 | 21.7 | 127.4 |
| | | 1951 | 42,634 | 31,835 | 74,469 | 4.8 | 57,615 | 2,799 | 1,115 | 26.2 | 1,213 | 68.8 | 7,070 | 20.7 | 113.5 |
| | Chic., Burl. & Quincy | 1952 | 20,377 | 24,573 | 44,950 | 3.2 | 55,021 | 2,850 | 1,303 | 30.6 | 1,272 | 61.5 | 6,420 | 19.4 | 103.0 |
| | | 1951 | 17,519 | 25,529 | 43,048 | 2.7 | 54,492 | 2,914 | 1,326 | 30.5 | 1,275 | 62.4 | 6,255 | 18.8 | 89.0 |
| | Chic., Rock I. & Pac. | 1952 | 12,887 | 23,906 | 36,793 | 3.2 | 49,175 | 2,732 | 1,232 | 31.0 | 1,032 | 48.8 | 4,852 | 18.1 | 126.9 |
| | | 1951 | 10,057 | 25,752 | 35,809 | 3.3 | 43,573 | 2,412 | 1,105 | 31.0 | 999 | 48.8 | 4,442 | 18.1 | 109.5 |
| | Denver & R. G. Wn. | 1952 | 6,581 | 8,934 | 15,515 | 3.7 | 54,151 | 3,086 | 1,401 | 31.1 | 1,163 | 52.4 | 8,115 | 17.6 | 114.9 |
| | | 1951 | 6,963 | 7,799 | 14,762 | 4.0 | 51,034 | 2,990 | 1,416 | 31.0 | 1,208 | 53.4 | 7,752 | 17.2 | 103.6 |
| | Southern Pacific | 1952 | 28,392 | 54,275 | 82,667 | 2.7 | 50,136 | 3,011 | 1,235 | 28.2 | 1,178 | 63.7 | 11,872 | 16.9 | 116.1 |
| | | 1951 | 24,633 | 48,749 | 73,382 | 3.1 | 50,855 | 3,047 | 1,259 | 28.4 | 1,205 | 64.5 | 11,223 | 16.9 | 104.6 |
| | Union Pacific | 1952 | 27,822 | 44,255 | 72,077 | 2.5 | 64,482 | 2,779 | 1,178 | 28.6 | 1,616 | 84.8 | 11,921 | 23.6 | 143.7 |
| | | 1951 | 27,709 | 37,496 | 65,205 | 2.5 | 63,668 | 2,903 | 1,255 | 29.0 | 1,685 | 86.2 | 11,375 | 22.3 | 132.1 |
| | Western Pacific | 1952 | 2,425 | 5,476 | 7,901 | 4.8 | 70,358 | 3,081 | 1,419 | 29.7 | 1,734 | 81.9 | 10,463 | 23.1 | 204.2 |
| | | 1951 | 1,761 | 5,160 | 6,921 | 5.0 | 69,619 | 3,205 | 1,505 | 28.9 | 2,056 | 93.5 | 10,755 | 21.9 | 112.3 |
| Southwestern Region | International-Gt. Northern* | 1952 | 857 | 7,679 | 8,536 | 2.7 | 52,639 | 2,743 | 1,277 | 34.8 | 840 | 35.0 | 6,415 | 19.3 | 97.3 |
| | | 1951 | 718 | 7,147 | 7,865 | 2.0 | 49,762 | 2,509 | 1,215 | 33.8 | 957 | 41.5 | 6,877 | 19.9 | 110.2 |
| | Kansas City Southern | 1952 | 998 | 6,675 | 7,673 | 3.6 | 75,564 | 3,709 | 1,760 | 32.6 | 1,287 | 57.1 | 11,030 | 20.5 | 165.9 |
| | | 1951 | 1,082 | 6,422 | 7,504 | 2.8 | 71,892 | 3,720 | 1,736 | 31.5 | 1,252 | 58.3 | 10,816 | 19.5 | 103.1 |
| | Mo.-Kans.-Texas Lines | 1952 | 3,162 | 7,608 | 10,770 | 5.7 | 49,301 | 2,487 | 1,081 | 28.2 | 1,350 | 71.8 | 4,323 | 19.8 | 132.2 |
| | | 1951 | 2,812 | 7,296 | 10,108 | 7.7 | 46,607 | 2,473 | 1,051 | 27.7 | 1,363 | 74.9 | 4,287 | 18.9 | 130.1 |
| | Missouri Pacific* | 1952 | 17,215 | 18,215 | 35,430 | 2.5 | 54,847 | 2,633 | 1,180 | 29.7 | 1,356 | 66.5 | 7,047 | 21.0 | 116.3 |
| | | 1951 | 14,230 | 18,443 | 32,673 | 2.8 | 52,373 | 2,607 | 1,181 | 30.5 | 1,490 | 72.2 | 7,195 | 20.2 | 112.0 |
| | Texas & Pacific | 1952 | 2,265 | 7,547 | 9,812 | 3.3 | 66,212 | 2,905 | 1,150 | 27.5 | 1,322 | 75.4 | 7,077 | 22.8 | 156.8 |
| | | 1951 | 2,144 | 7,791 | 9,935 | 5.8 | 59,605 | 2,809 | 1,105 | 26.8 | 1,271 | 72.9 | 6,818 | 21.2 | 100.7 |
| | St. Louis-San Francisco | 1952 | 8,081 | 15,824 | 23,905 | 3.1 | 45,251 | 2,644 | 1,167 | 30.0 | 1,050 | 53.7 | 5,341 | 17.2 | 105.6 |
| | | 1951 | 7,375 | 14,897 | 22,272 | 3.7 | 42,777 | 2,403 | 1,068 | 30.3 | 1,030 | 52.5 | 5,084 | 17.9 | 68.4 |
| | St. Louis Southw. Lines | 1952 | 1,794 | 5,566 | 7,360 | 1.6 | 52,630 | 2,631 | 1,176 | 27.2 | 1,723 | 86.2 | 8,193 | 20.0 | 136.9 |
| | | 1951 | 1,670 | 5,873 | 7,543 | 2.1 | 49,200 | 2,540 | 1,136 | 27.2 | 1,755 | 88.9 | 8,057 | 19.4 | 115.7 |
| | Texas & New Orleans | 1952 | 5,287 | 19,528 | 24,815 | 2.7 | 46,149 | 2,484 | 1,079 | 30.4 | 1,167 | 60.7 | 6,684 | 18.7 | 119.9 |
| | | 1951 | 3,966 | 20,432 | 24,398 | 2.5 | 43,264 | 2,353 | 1,001 | 28.8 | 1,117 | 60.2 | 6,257 | 18.6 | 109.1 |

*Report of trustee or trustees.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

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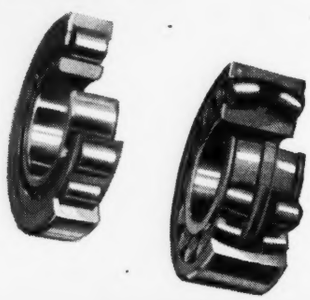

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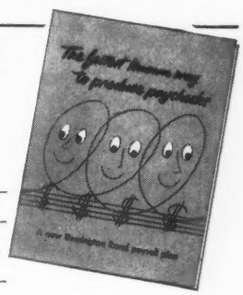
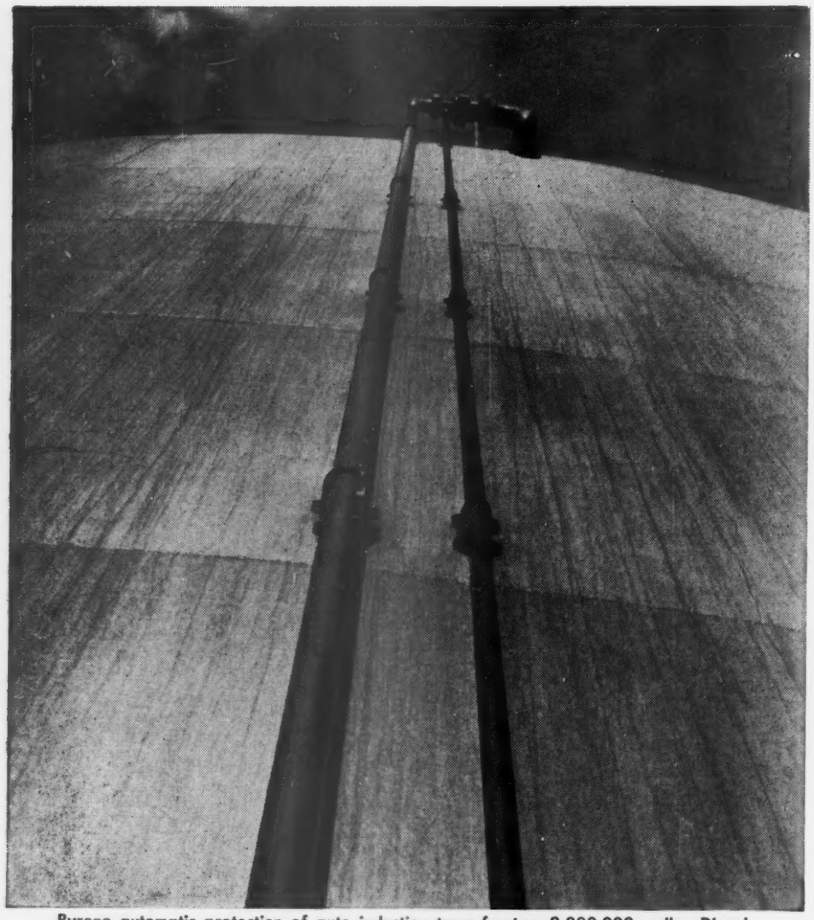


(*Continued from page* 68)

- A clear statement of federal policy in the basic law, that users of transportation facilities built with public funds be required to pay their fair share of the cost.
- Legislation to prevent "unreasonable" delay in action by the Interstate Commerce Commission on requests for rate adjustments.
- Modernization of rules of rate making to require the I.C.C. to consider first the effect of new rates on the industry's return on invested capital.
- Repeal of certain rules that apply only to railroads.
- Legislation allowing railroads to appeal to federal bodies from adverse decisions of state commissions.

An increased tempo in movement requirements by the armed forces was forecast by J. J. Kelley, manager of the Military Transportation Section of the Association of American Railroads. He explained that 200 days' supply had to be in the world-wide military transport "pipeline" to deliver one day's supply in the field. "These transportation requirements are not seasonal, but continue daily, weekly and monthly," he said. He urged prompt, clean unloading of cars to help meet them.

G. W. Thompson, general chairman of the board and general traffic manager of the Missouri Portland Cement Company, presided over the two-day meeting.

Pyrene automatic protection of auto induction type for two 2,000,000 gallon Diesel storage tanks of major road. Other Pyrene systems, with single pipeline to foam maker, use other methods of foam compound induction.

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## OVERSEAS

### Indian Railways to Celebrate Centenary

The Ministry of Railways of the government of India is organizing an exhibition to celebrate a century of progress on Indian railways, according to Foreign Commerce Weekly. The exhibition, scheduled to be held next year in New Delhi from February 28 to April 17, will display the variety of services provided on Indian railways by featuring different types of rolling stock; show the relationship of the railways to the nation's economy; and how Indian railways compare with railways elsewhere in the world.

Also featured will be displays indicating the industrial effort of other countries which contribute to the growth of Indian railways; modern developments of other countries in railway transportation and allied industries; and advances in production techniques. Exhibits may be in the form of maps, charts, photographs and films; raw or processed engineering materials; and working, still, or sectional models of structures and machinery or rolling stock. Water and electricity will be available for working exhibits. Track space, broad- and

meter-gage only, will be available for exhibitors of rolling stock.

Cooperation of American railroads and railroad supply manufacturers in lending exhibit material has been requested by the Department of Commerce. Exhibits will be assembled in Washington, D.C., transported to New Delhi and returned to the supplier soon after close of the exhibition. Cost of transportation from Washington to New Delhi. and return, as well as space rental and other local costs, including insurance, will be assumed by the Department of State. Arrangements for dispatch of exhibit material to India may be made with Z. B. Hyde, chief of the fairs and exhibitions section, international trade development division, Office of International Trade, Department of Commerce, Washington 25, D.C.

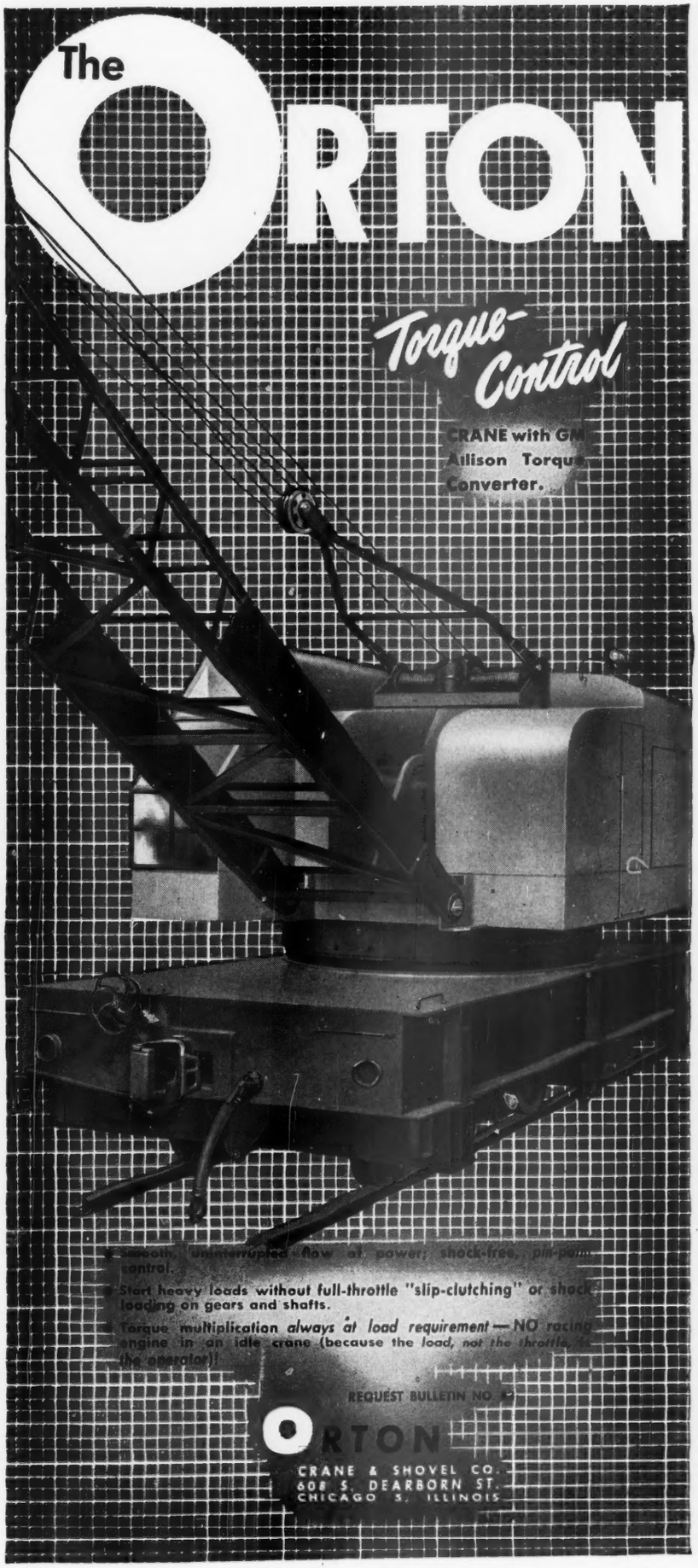
## Central Africa's First Electrified RR Opened

A 105-kilometer (approximately 65-mile) stretch of electrified railroad, said to be the first in Central Africa, recently was placed in operation between Jadotville and Tenke in the Belgian Congo, according to Foreign Commerce Weekly. Traffic over this electrified portion of the Chemin de Fer du Bas Congo au Katanga is the heaviest on the entire system.

Although of great importance economically, perhaps the most significant phase of the electrification is technical, Foreign Commerce Weekly added. Instead of using conventional three-phase current at 1,500 or 2,000 volts, a single phase 22,000-volt, 50-cycle system is used. This method is used also on a 78-kilometer stretch in France between Aix-les-Bains and La Roche-sur-Foront. It is estimated the new African system saved 40 to 45 per cent in installation cost, an appreciable amount of the saving being due to the smaller amounts of copper needed in trolley and feeder lines. Also, the 22,000 volt installation permits greater distances between substations.

**Great Britain.**—British Railways shortly will undertake use of multiple-unit diesel trains in passenger service. With approval of the British Transport Commission, the Railway Executive is said to be planning an immediate initial expenditure of up to £500,000 on the program. Such a step would be the first in a recently announced policy of using lightweight diesel units, wherever suitable, to reinforce or replace steam services.

**Thailand.**—This country's State Railways are inviting bids until next January 6 for supply of 400 low-side steel cars for use on one-meter gage railroads, according to Foreign Commerce Weekly. A set of bidding documents, including blueprints and specifications, may be borrowed from the Commercial Intelligence Division, U.S. Department of Commerce, Washington 25, D.C.

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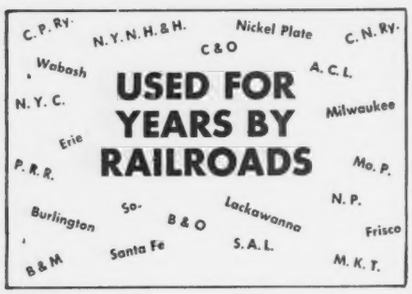


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## Current Publications

### PERIODICAL ARTICLE

*The Nation's Railroads Modernize to Survive. Newsweek, October 27, 1952, pp. 96-99. Newsweek, 152 W. 42 st., New York 36. Single copies, 20 cents.*

Newsweek's editors describe the ingenious methods the railroads are adopting to keep out of the red, and analyze the future of the industry.

### TRADE PUBLICATIONS

*How to Operate a Lift Truck. 24 pages. Hyster Company, 2902 N.E. Clackamas st., Portland 8, Ore. Free from Hyster or its authorized dealers.*

Combining a two-color cartoon technique with a detailed manual, this booklet contains information on proper operation of lift trucks, safety and basic materials handling, and preventive maintenance. It is designed for use as a part of an operator training school or for individual study, and is slanted for both the beginner and the experienced operator. Plans are included for setting up a training obstacle course.

*Fairmont Railway Motor Cars and Work Equipment. Bulletin 660, 52 pages. Fairmont Railway Motors, Inc., Fairmont, Minn. Free.*

Catalog of the entire Fairmont line of engines, motor cars and accessories, trailers, push cars, ballast-maintenance cars, tool cars, ballast discers, weed burners, weed mowers, weed sprayers, oil sprayers, grouting outfits, derrick cars, and numerous rail-laying and tie-renewal equipment. Complete specifications and available attachments for each piece of equipment are included.

*"How to Catch Man-Hour Thieves." Towmotor Corporation, 1226 E. 152nd st., Cleveland 10, Ohio. Free from Towmotor or its authorized representatives.*

Illustrating how inefficient materials handling can handicap successful production, this booklet covers the five major causes of heavy man-hour losses and four basic plant operations in which such losses are most often sustained. Suggestions for procedures which have proved most effective in reducing these losses are detailed in this booklet.

### PAMPHLET

*Comparative Statement of Railway Operating Statistics, Individual Class I Steam Railways in the United States for the years ended December 31, 1951 and 1950. 63 pages. Prepared by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. For sale by Government Printing Office, Washington 25, D.C. No price given.*

Contains, for each Class I railway, statistics on revenues and expenses, income and balance sheet items, traffic, freight commodities, freight train performance, passenger train performance, yard service performance, fuel and power, motive power, car equipment, and wages.


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